

DEPARTMENT OF RAILWAYS AND CANALS

CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1909

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

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EXCELLENT MAJESTY

1910

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the report on Canal Statistics for the year ended December 31, 1909.

GEO. P. GRAHAM,
Minister of Railways and Canals.

To the Honourable GEORGE P. GRAHAM,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1909.

I have the honour to be, Sir,

Your obedient servant,

A. W. CAMPBELL,
Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS,

February 7, 1910.

A. W. CAMPBELL, Esq.,
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended December 31, 1909.

At the commencement of the season of navigation a new form of ship's report was adopted. This schedule presents the advantages of being considerably shorter than that which had for many years been in use, and of conforming closely with the classification of commodities in force on the railways of both Canada and the United States.

The traffic of the canals in 1909 amounted to 33,720,748 tons, representing an increase of 16,217,928 tons over 1908, or 92.6 per cent.

Of the total volume of business, 27,976,399 tons were classified as down, or east-bound ; while 5,744,349 were entered as up, or westbound. There was for the year an increase of 14,739,171 tons in the former, and of 1,478,757 tons in the latter.

The net increase of 16,217,928 tons for the year 1909 was divided among the various canals as follows :—

	1908.	1909.	Increase.
Sault Ste. Marie.....	12,759,216	27,861,245	15,102,029
Welland.....	1,703,453	2,025,951	322,498
St. Lawrence.....	2,009,102	2,410,629	401,527
Chambly.....	503,276	752,117	248,841
St. Peter's.....	72,015	79,850	7,835
Murray.....	25,901	102,291	76,390
Ottawa.....	258,527	336,939	78,412
Rideau.....	89,640	91,774	2,134
Trent.....	81,690	59,952	.....

The aggregate of business through the canals of Canada during the year 1909 may be better comprehended by a comparison with the results for the preceding nine years. The figures are as follow :—

1900.....	5,013,693 tons.
1901.....	5,665,259 "
1902.....	7,513,197 "
1903.....	9,203,817 "
1904.....	8,256,236 "
1905.....	9,371,744 "
1906.....	10,523,185 "
1907.....	20,543,639 "
1908.....	17,502,820 "
1909.....	33,720,748 "

Following is a comprehensive table, showing both the volume and direction of freight traffic for a series of years :—

STATEMENT of total Freight passed through the Canals for the following years:—

Years.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		TOTAL TONS.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
1887	336,648	1,154,424	138,692	202,563	151,805	192,528	86,374	457,482	713,519	2,006,997	2,720,516
1888	355,165	1,146,260	138,127	174,239	214,407	223,429	81,611	428,357	789,310	1,972,287	2,761,597
1889	384,777	1,156,306	122,295	198,497	267,224	300,193	81,243	603,311	855,529	2,258,367	3,113,896
1890	369,593	1,137,011	144,368	133,188	216,813	320,324	58,709	533,021	789,505	2,123,542	2,913,047
1891	370,120	1,155,247	103,814	123,193	248,188	307,958	50,747	543,259	772,869	2,129,657	2,902,526
1892	327,560	1,322,137	173,538	135,787	241,034	302,983	47,396	481,301	789,528	2,242,208	3,031,736
1893	351,706	1,344,822	214,076	141,602	247,329	385,769	54,912	806,773	868,023	2,678,966	3,546,989
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	568,866	780,522	2,162,193	2,942,715
1895	264,824	1,070,046	286,191	91,177	362,637	608,778	62,285	590,140	975,937	2,360,141	*3,336,078
1896	293,353	1,619,668	259,659	100,519	1,197,245	3,536,054	117,535	867,040	1,867,792	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,142	4,369,314	108,787	968,203	1,322,216	7,238,751	8,560,967
1898	263,989	1,819,887	187,253	98,967	829,508	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	266,364	115,133	732,030	2,129,988	125,678	727,111	1,420,280	4,805,644	6,225,924
1900	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	703,563	1,255,586	3,758,107	5,013,693
1901	340,805	1,686,094	268,449	201,231	507,204	1,801,696	177,715	682,065	1,294,173	4,371,086	5,665,259
1902	529,085	2,064,480	308,212	342,484	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197
1903	648,150	2,391,366	430,174	408,500	863,337	3,130,816	373,456	958,018	2,315,117	6,888,700	9,203,817
1904	606,737	2,047,499	511,887	276,578	699,784	2,778,903	483,795	851,053	2,302,203	5,954,033	8,256,236
1905	736,976	2,252,514	549,365	347,089	607,228	3,183,895	577,528	1,137,146	2,451,097	6,920,647	9,371,744
1906	1,238,929	2,355,855	627,094	234,919	991,508	3,595,256	482,239	997,385	3,339,770	7,183,415	10,523,185
1907	1,034,733	3,162,158	891,692	226,138	1,991,959	11,060,878	819,369	1,356,712	4,737,753	15,805,886	20,543,639
1908	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820
1909	1,674,283	3,439,225	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,744,349	27,976,399	33,720,748

* Sault Ste. Marie canal opened in August, 1895.

SESSIONAL PAPER No. 20a

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years:—

CANADIAN VESSELS.

Years.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		TOTAL TONS.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1887.....	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,013	1,395,932	1,452,020	2,847,952	18,991
1888.....	1,113,290	1,120,774	158,209	34,368	1,252	.....	22,553	189,876	1,295,304	1,345,018	2,640,322	17,661
1889.....	1,285,574	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	2,995,582	19,393
1890.....	1,314,127	1,250,999	229,478	32,909	929	351	14,003	296,676	1,558,537	1,580,935	3,139,472	20,655
1891.....	1,356,518	1,287,168	201,758	28,642	550	292	16,350	244,176	1,575,176	1,560,278	3,135,454	19,246
1892.....	1,517,249	1,460,505	177,136	29,184	1,466	394	14,659	201,374	1,710,510	1,691,455	3,401,965	21,177
1893.....	1,548,094	1,422,326	170,186	26,787	1,172	10	17,037	248,442	1,736,489	1,697,565	3,434,054	20,757
1894.....	1,319,792	1,260,907	217,635	19,298	2,177	5	6,394	222,696	1,545,998	1,502,906	3,048,904	19,027
1895.....	1,258,848	1,165,683	253,693	13,383	.....	.....	5,899	285,553	1,518,440	1,464,619	2,983,059	17,136
1896.....	1,547,757	1,420,342	200,292	5,234	157	.....	4,115	271,809	1,752,321	1,697,385	3,449,706	20,972
1897.....	1,629,192	1,482,951	215,785	11,378	.....	.....	3,533	297,898	1,848,510	1,792,227	3,640,737	21,466
1898.....	1,704,661	1,609,255	215,393	4,927	499	518	6,805	255,927	1,927,358	1,870,627	3,797,985	21,509
1899.....	1,865,643	1,774,789	242,817	32,436	925	3,691	42,290	345,980	2,151,675	2,156,896	4,308,571	23,579
1900.....	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	4,129,250	21,755
1901.....	1,615,952	1,587,221	279,007	82,541	3,300	2,908	97,332	312,003	1,995,591	1,984,673	3,980,264	20,860
1902.....	1,914,167	1,840,787	241,356	97,492	1,874	2,164	101,335	286,520	2,258,732	2,226,963	4,485,695	22,198
1903.....	2,061,258	2,088,969	340,383	143,614	7,018	3,082	188,896	379,612	2,597,555	2,615,277	5,212,832	23,767
1904.....	1,838,260	1,907,886	299,245	159,740	5,175	4,223	237,910	319,661	2,380,590	2,391,510	4,772,100	21,851
1905.....	2,059,097	2,031,766	312,773	188,138	11,820	3,191	262,401	322,005	2,646,091	2,545,100	5,191,191	23,726
1906.....	2,271,776	2,264,476	292,705	155,595	24,420	5,506	202,276	309,567	2,791,177	2,735,144	5,526,321	25,498
1907.....	2,561,948	2,661,317	337,822	129,246	9,153	7,331	238,172	383,922	3,147,095	3,181,816	6,328,911	28,833
1908.....	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	6,780,789	29,040
1909.....	3,335,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,043	3,835,535	7,811,578	22,507

STATEMENT of the Tonnage of Canadian and United States Vessels, for the following years :—

UNITED STATES VESSELS.

YEARS.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		TOTAL TONS.	Number o Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up & Down.			
1887.....	16,265	17,925	38,857	56,708	143,730	140,562	52,793	98,840	251,645	315,035	566,680	3,883
1888.....	14,304	26,801	42,425	50,047	177,714	156,095	49,778	114,613	284,221	347,556	631,777	3,921
1889.....	21,125	26,449	55,996	50,732	253,088	206,567	56,249	160,442	386,458	444,190	830,648	4,542
1890.....	10,390	16,345	38,156	36,397	248,418	234,728	39,697	97,266	336,661	384,736	721,397	3,364
1891.....	10,357	29,851	70,665	27,727	283,013	238,818	31,083	146,602	395,118	442,998	838,116	3,602
1892.....	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,596	454,199	871,795	3,928
1893.....	10,752	34,303	214,047	33,741	351,994	282,724	50,994	307,740	627,787	658,508	1,286,295	4,585
1894.....	18,528	30,201	139,720	20,830	302,562	269,788	37,406	192,992	498,216	513,811	1,012,027	4,131
1895.....	8,838	24,768	138,554	17,712	262,240	216,542	32,295	185,730	441,927	444,752	886,679	4,427
1896.....	11,496	19,093	195,228	21,953	357,205	292,359	40,416	290,370	604,345	623,775	1,228,120	4,650
1897.....	14,666	18,367	269,430	17,618	338,938	277,345	26,341	347,698	649,375	661,028	1,310,403	4,675
1898.....	12,142	9,541	233,524	32,880	308,878	305,464	32,331	336,004	586,875	683,889	1,270,764	4,264
1899.....	17,217	18,044	172,897	30,002	1,605,887	1,156,503	51,902	234,336	1,846,848	1,438,885	3,285,733	6,101
1900.....	13,316	17,824	157,689	30,443	1,208,725	744,276	45,741	190,971	1,425,471	983,514	2,408,985	5,502
1901.....	11,587	18,706	177,169	28,124	922,464	1,044,707	54,895	224,622	1,166,115	1,316,159	2,482,274	5,634
1902.....	13,622	37,871	187,826	70,641	1,756,948	1,654,672	123,257	241,602	2,081,653	2,004,786	4,086,439	6,433
1903.....	14,014	24,168	265,208	65,247	1,736,187	1,689,414	103,401	335,836	2,121,810	2,114,665	4,236,475	6,695
1904.....	10,122	16,890	275,721	39,993	1,464,316	1,475,085	68,081	305,697	1,818,240	1,837,665	3,655,905	6,253
1905.....	19,743	19,444	364,985	81,876	2,350,494	1,701,704	101,536	456,459	2,836,758	2,259,483	5,096,241	7,085
1906.....	34,306	15,324	356,259	78,561	2,738,623	1,928,131	115,675	418,436	3,244,863	2,440,452	5,685,315	7,319
1907.....	57,349	72,018	304,591	72,048	4,730,053	5,376,060	205,769	623,941	5,463,767	6,141,067	11,604,834	9,328
1908.....	54,587	32,705	442,773	124,120	2,975,624	4,142,392	218,835	536,103	3,685,819	4,835,320	8,521,139	7,489
1909.....	263,592	109,407	442,176	200,202	4,178,378	10,429,314	213,750	621,903	5,098,196	11,361,126	16,459,322	9,996

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It will be observed that while 9,996 United States vessels carried 16,459,322 tons through the canals of Canada in 1909, it required 22,507 Canadian vessels to carry 7,811,578 tons. The explanation is found in the fact that the business of American vessels is confined almost wholly to the lakes, where large cargoes prevail, while many craft of small capacity pass through the canals east of the Welland. The record of trade for the past five years, however, would seem to warrant the conclusion that an increase is steadily taking place in the tonnage of Canadian vessels.

The statement following brings the capital expenditure on the Canals of the Dominion down to March 31, 1909. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville Canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow :—

Canal.	Construction.	Enlargement.	Total.
	\$ cts.	\$ cts.	\$ cts.
St. Peter's.	648,547 14		648,547 14
Lachine.	2,589,532 85	9,570,566 95	12,160,099 80
Beauharnois.	1,636,690 26		1,636,690 26
St. Lawrence River and Canals.	18,442 85	3,415,023 38	3,433,466 23
Lake St. Louis.		298,176 11	298,176 11
Lake St. Francis.		75,906 71	75,906 71
Cornwall.	1,945,624 73	5,289,052 87	7,234,677 60
Williamsburg { Farran's Point.		877,090 57	10,485,611 69
Galops.		6,118,927 32	
Rapid Plat.		2,158,242 00	
Williamsburg.	1,320,655 54	10,696 26	
Welland.	7,693,824 03	20,644,791 99	28,338,616 02
Ste. Anne's.	134,456 51	1,035,759 12	1,170,215 63
*Carillon and Grenville	63,053 64	4,119,039 32	4,182,092 96
Culbute.	382,776 46		382,776 46
Rideau.	4,085,889 21		4,085,889 21
Saint Ours.	121,537 65		121,537 65
Chambly.	637,214 66	13,307 12	650,521 68
Murray.	1,248,946 71		1,248,946 71
Trent.	6,873,501 09		6,873,501 09
Tay.	489,599 23		489,599 23
Saut Ste. Marie.	4,821,723 47		4,821,723 47
Soulanges.	6,973,113 38		6,973,113 38
Total	41,685,129 41	53,626,579 62	94,311,859 03

Details of tonnage by canals and commodities will be found in the tables subjoined.

I have the honour to be, Sir,
Your obedient servant,

J. L. PAYNE,
Comptroller of Statistics.

CANAL STATISTICS FOR SEASON OF NAVIGATION, 1909.

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland Canal, from ports west of Port Colborne for a period of twenty-eight years is as follows :—

QUANTITY PASSED DOWN TO MONTREAL.		To Ports in Ontario.	Quantity from U.S. Ports to U.S. Ports.
	Tons.	Tons.	Tons.
1882.....	180,694	.....	63,881
1883.....	186,814	10,650	121,876
1884.....	142,194	12,153	104,537
1885.....	96,569	11,909	117,346
1886.....	203,940	9,881	151,551
1887.....	185,034	11,838	134,868
1888.....	160,358	25,599	169,664
1889.....	267,769	19,075	213,766
1890.....	288,513	16,899	245,932
1891.....	295,509	6,805	202,710
1892.....	261,954	8,942	201,540
1893.....	501,806	25,555	222,958
1894.....	273,651	16,699	203,979
1895.....	231,491	32,096	133,823
1896.....	461,049	73,386	160,372
1897.....	* 560,254	53,257	157,756
1898.....	519,532	31,279	144,612
1899.....	332,746	40,197	68,011
1900.....	244,661	17,525	84,589
1901.....	151,566	13,732	83,370
1902.....	208,215	22,787	81,164
1903.....	351,936	29,062	111,828
1904.....	198,246	23,711	102,523
1905.....	341,431	42,061	129,270
1906.....	404,935	33,351	176,119
1907.....	635,573	42,032	163,295
1908.....	756,141	38,142	135,172
1909.....	652,742	40,238	129,587

* Of the quantity of grain passed down to Montreal there were transhipped at Ogdensburg, in 1891, 17,817 tons ; in 1892, 4,341 tons ; in 1893, 71,445 tons ; in 1894, 23,030 tons ; in 1895, 18,987 tons ; in 1896, 77,355 tons ; in 1897, 89,659 tons ; in 1898, 40,257 tons ; in 1899, 48,828 tons ; in 1900, 38,403 tons ; in 1901, 17,387 tons ; in 1902, 34,060 tons ; in 1903, 40,641 tons ; none in 1904, 1905, 1906, 1907 nor 1908.

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 244,661 tons in 1900 to 652,742 tons in 1909, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 84,589 to 129,587 tons the same years.

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 13 years, is reported as follows :—

10-11 EDWARD VII., A. 1911

	Tons.
For 1897.....	228,611
1898.....	293,391
1899.....	209,170
1900.....	229,624
1901.....	227,700
1902.....	263,861
1903.....	253,959
1904.....	154,625
1905.....	148,377
1906.....	386,963
1907.....	383,735
1908.....	285,262
1909.....	

The quantity of the same articles passed down the whole length of the St. Lawrence Canals to Montreal for the same period was :—

	Tons.
For 1897.....	604,200
1898.....	575,097
1899.....	372,291
1900.....	295,928
1901.....	203,316
1902.....	242,225
1903.....	400,057
1904.....	220,076
1905.....	375,630
1906.....	449,673
1907.....	684,697
1908.....	776,374
1909.....	652,742

Comparative shipments of grain by the St. Lawrence route, and rail and water via the State of New York, are as follows :—

QUANTITY OF GRAIN TO SEA BOARD BY COMPETING ROUTES.

The quantity of grain and pease passed down the whole length of the St. Lawrence Canal to Montreal, is as follows :—

	Tons.
For 1908.....	756,141
1909.....	652,742
Showing a decrease of.....	103,399

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways is reported as follows :—

	Tons.
For 1908.....	285,262
1909.....	
Showing a decrease of.....	

TRANSHIPMENT OF GRAIN.

In Canadian vessels there were in—

				Tons.
1895,	123 cargoes,	with an aggregate	quantity of	136,617
1896,	196	"	"	227,912
1897,	180	"	"	229,265
1898,	166	"	"	224,021
1899,	162	"	"	221,306
1900,	325	"	"	183,200
1901,	112	"	"	132,558
1902,	131	"	"	175,514
1903,	170	"	"	218,840
1904,	115	"	"	174,121
1905,	167	"	"	239,418
1906,	205	"	"	344,605
1907,	255	"	"	427,813
1908,	355	"	"	598,941
1909,		"	"	550,276

In the United States vessels there were in—

		Tons.
1894,	84 cargoes, with an aggregate quantity of	106,236
1895,	" " " " " " " " " " " "	73,987
1896,	158 " " " " " " " " " " " "	217,978
1897,	197 " " " " " " " " " " " "	285,847
1898,	339 " " " " " " " " " " " "	464,852
1899,	167 " " " " " " " " " " " "	205,571
1900,	259 " " " " " " " " " " " "	163,575
1901,	135 " " " " " " " " " " " "	123,229
1902,	135 " " " " " " " " " " " "	136,652
1903,	219 " " " " " " " " " " " "	273,986
1904,	118 " " " " " " " " " " " "	150,359
1905,	235 " " " " " " " " " " " "	273,344
1906,	178 " " " " " " " " " " " "	269,800
1907,	263 " " " " " " " " " " " "	413,087
1908,	271 " " " " " " " " " " " "	330,514
1909,	" " " " " " " " " " " "	272,291

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908 ; 87 Canadian and 9 American of 135,582 in 1907 ; 74 Canadian and 10 American of 108,734 tons in 1906 ; 96 Canadian and 18 American of 180,206 in 1905 ; 56 Canadian and 16 American of 116,095 tons in 1904 ; 56 Canadian and 18 American of 99,582 tons in 1903 ; 19 Canadian and 17 American of 34,804 tons in 1902 ; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891 ; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

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The quantity of grain transhipped at Port Colborne in 1909 and the four previous years was as follows :—

Articles.	1905.	1906.	1907.	1908.	1909.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	679,840	1,009,474	1,428,300	1,106,244	2,686,963
Corn.....	104,027	110,629	112,036	.....	.....
Rye.....	.....	.....	.....	.....	.....
Oats.....	.....	29,118	30,824	23,945	.....
Barley.....	.....	2,103	.....	56,544	22,216
Flax Seed . . . . .	.....	.....	39,040	49,628	8,202

WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1909 was 2,025,951 tons ; of this quantity 49,911 tons was way or local freight.
There were 1,383,862 tons of freight passed eastward, and 642,089 passed westward.

East and West bound Through Freight.

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1909 was 1,976,040.
Of this quantity 1,335,023 tons were east bound and 641,017 west bound freight.
Of the east bound through freight, Canadian vessels carried 926,901 tons and United States vessels carried 408,122 tons ; and of the west bound through freight Canadian vessels carried 320,793 tons and United States vessels carried 320,224 tons, or a total of 1,247,694 tons for Canadian and 728,346 tons for American vessels.

ST. LAWRENCE CANALS

The total quantity of freight passed through these canals during 1909 was 2,410,629 tons ; of this quantity 1,564,584 tons passed eastward and 846,045 passed westward.

East and West bound Through Freight.

The total quantity of through freight was 1,727,564 tons ; of this quantity 1,209,979 tons were east bound and 517,585 tons were west bound.

Way Freight.

Of the total quantity of (way) or local freight 354,750 tons were east bound and 328,315 tons west bound freight.

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THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows :—

	Eastward, to Montreal. Tons.	Westward, from Montreal. Tons.
1895.....	266,659	10,555
1896.....	480,077	10,050
1897.....	584,246	4,542
1898.....	538,108	4,436
1899.....	354,933	5,991
1900.....	288,251	6,217
1901.....	184,420	13,714
1902.....	250,475	25,289
1903.....	390,786	100,699
1904.....	278,328	71,512
1905.....	448,704	72,482
1906.....	554,231	96,791
1907.....	789,167	1,281
1908.....	864,926	3,472
1909.....	925,005	191,510

THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of through freight passed eastward and westward through the Welland Canal, from United States ports to United States ports, for a period of fifteen years, was as follows :—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1895.....	255,259	214,520	469,779
1896.....	385,695	267,518	653,213
1897.....	353,863	210,831	564,694
1898.....	277,023	210,516	487,539
1899.....	225,491	135,038	360,529
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225
1904.....	165,337	87,144	252,481
1905.....	190,547	112,549	303,096
1906.....	237,226	84,205	321,431
1907.....	218,997	177,660	396,657
1908.....	209,518	239,136	448,654
1909.....	196,838	248,581	445,419

The total quantity of freight pass through the Welland Canal from United States ports to United States ports shows a decrease of 3,235 tons as compared with the previous year ; and a decrease of 24,380 tons as compared with 1895.

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The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1909 inclusive.

Fiscal Year.	Aggregate number of Vessels.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867..	5,405	933,260	458,386
1868..	6,157	1,161,821	641,711
1869.....	6,069	1,231,903	688,700
1870.....	7,356	1,311,956	747,567
1871..	7,729	1,478,122	772,756
Season of navigation.			
1872.....	6,063	1,333,104	606,627
1873.....	6,425	1,506,484	656,208
1874.....	5,814	1,389,173	748,557
1875.....	4,242	1,038,050	477,809
1876.....	4,789	1,099,810	488,815
1877.....	5,129	1,175,398	493,841
1878.....	4,429	968,758	373,738
1879.....	3,960	865,664	284,043
1880.....	4,104	819,934	179,605
1881.....	3,332	686,506	194,173
1882.....	3,334	790,643	282,806
1883.....	3,267	1,005,156	432,611
1884.....	3,138	837,811	407,079
1885.....	2,738	784,928	384,509
1886.....	3,589	980,135	464,478
1887.....	2,785	777,918	340,501
1888.....	2,647	878,800	434,753
1889.....	2,975	1,085,273	563,584
1890.....	2,883	1,016,165	533,957
1891.....	2,594	975,013	553,800
1892.....	2,615	955,554	541,065
1893.....	2,843	1,294,823	631,667
1894.....	2,412	1,008,221	592,267
1895.....	2,222	869,595	463,779
1896.....	2,766	1,279,987	653,213
1897.....	2,725	1,274,292	564,694
1898.....	2,384	1,140,077	487,539
1899.....	2,202	789,770	360,529
1900.....	2,399	719,360	318,529
1901.....	1,547	620,209	274,019
1902.....	1,568	665,387	269,029
1903.....	1,787	1,002,919	370,225
1904.....	1,433	811,371	252,481
1905.....	1,595	1,092,050	305,096
1906.....	1,536	1,201,967	321,431
1907.....	1,982	1,614,132	396,743
1908.....	2,351	1,703,453	448,654
1909.....	2,433	2,025,951	445,419

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The total quantity of freight passed through the several divisions of the Canadian Canal system during the season of 1909 is as follows :

	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Produce of Mines.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland.	1,129	186,614	506,489	410,982	920,737	2,025,951
St. Lawrence	12,877	509,157	472,656	642,209	773,730	2,410,629
Chambly.	430	599,330	9,560	122,835	19,962	752,117
Ottawa	3,735	232,025	64,153	31,305	5,721	336,939
Rideau	1,730	26,727	42,642	17,036	3,639	91,774
St. Peters	3,047	8,423	7,626	45,140	15,614	79,850
Murray.	690	655	50,035	50,083	828	102,291
Trent Valley.	189	55,086	1,880	1,832	965	59,952
Sault Ste. Marie	474	71,129	710,360	23,969,481	3,109,801	27,861,245

The total quantity of freight moved on the Welland Canal was 2,025,951 tons, of which 920,737 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,410,629 tons, of which 773,730 were agricultural products, and 472,656 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 336,939 tons; of this quantity 232,035 tons were the produce of the forest.

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COMPARATIVE STATEMENT of the Commerce through the United States, St. Mary's Falls Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1908 and 1909.

	Traffic for 1909.		Total traffic for		Increase.	Decrease.
	United States canal.	Canadian canal.	Season 1909.	Season 1908.	Amount.	Amount.
Vessels.....Number	12,803	6,331	19,134	15,184	3,950	
Lockages....."	8,525	5,046	13,571	10,685	2,886	
Tonnage registered....Net Tons	28,939,463	17,839,674	46,779,137	31,126,386	15,652,751	
" freight....."	30,132,374	27,861,245	57,993,619	41,416,513	16,577,106	
Passengers.....Number	27,736	32,810	60,546	53,306	7,240	
Coal (hard).....Net Tons	1,060,753	361,918	1,422,671	1,362,435	60,236	
" (soft)....."	6,150,540	2,435,781	8,586,321	8,545,923	40,398	
Flour.....Barrels	4,580,833	2,522,700	7,103,533	5,614,650	1,488,883	
Wheat.....Bushels	38,438,716	74,401,000	112,839,716	106,698,934	6,140,782	
Grain (excluding wheat)."	17,990,396	29,503,240	47,493,636	43,452,705	4,040,931	
Manufactured&pig iron.Net Tons	363,459	209,433	572,892	308,179	264,713	
Salt.....Barrels	419,977	201,114	651,091	549,254	101,837	
Copper.....Net Tons	118,889	8,323	127,212	101,329	25,883	
Iron ore....."	18,866,499	21,156,915	40,023,414	24,637,001	15,386,413	
Lumber.....ft. B.M.	517,694,000	34,309,300	552,003,300	457,165,355	94,837,945	
Silver ore.....Net Tons						
Building stone....."	1,784		1,784	11,589		9,805
Unclassified freight...."	599,564	532,022	1,131,586	823,597	307,989	

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The United States canal was open to navigation during the season of—

1889.....	234 days	1900.....	238 days
1890.....	228 "	1901.....	230 "
1891.....	225 "	1902.....	256 "
1892.....	233 "	1903.....	249 "
1893.....	219 "	1904.....	223 "
1894.....	234 "	1905.....	245 "
1895.....	231 "	1906.....	249 "
1896.....	232 "	1907.....	233 "
1897.....	234 "	1908.....	231 "
1898.....	241 "	1909.....	236 "
1899.....	231 "		

The Canadian canal was open to navigation during the season of—

1895.....	87 days	1903.....	256 days
1896.....	218 "	1904.....	241 "
1897.....	238 "	1905.....	255 "
1898.....	243 "	1906.....	253 "
1899.....	239 "	1907.....	238 "
1900.....	238 "	1908.....	235 "
1901.....	246 "	1909.....	240 "
1902.....	264 "		

The average number of vessels passing per day through the two canals for the season of 1909 was over eighty-one.

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A—TABLE showing the total tonnage of the undermentioned articles moved Up and Down

VEGETABLE FOOD.							
Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869.....	45,674	313,825	120,599	20,951	.....	904	1,937
1872.....	26,651	239,998	254,902	6,035	7,752	64	2,745
1873.....	30,665	355,847	180,169	8,225	1,194	3	3,777
1874.....	24,019	413,212	181,151	18,871	5,954	513	8,677
1875.....	13,964	253,835	103,749	35,751	3,383	917	6,337
1876.....	15,778	201,906	144,501	18,455	24,496	1,454	3,198
1877.....	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878.....	9,121	191,982	185,931	10,979	3,088	.....	2,302
1879.....	10,710	274,570	144,506	4,655	1,239	440	2,444
1880.....	12,679	242,020	163,738	17,772	477	1,016	1,480
1881.....	9,959	127,832	101,075	24,509	.....	1,844	2,086
1882.....	12,261	215,056	54,799	20,126	611	3,226	403
1883.....	13,471	152,794	182,269	10,436	731	1,642	10,983
1884.....	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885.....	13,334	124,206	117,536	15,801	1,116	.....	1,912
1886.....	19,474	154,169	219,442	1,595	4,911	564	14,657
1887.....	23,949	221,927	114,938	9,574	12,050	.....	12,533
1888.....	16,983	160,963	194,886	5,906	26,629	811	13,608
1889.....	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890.....	14,461	118,002	327,394	10,830	27,728	1,549	20,876
1891.....	13,517	198,658	185,180	8,113	52,959	65,888	28,042
1892.....	17,046	232,019	192,548	6,433	37,173	9,392	32,815
1893.....	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894.....	33,628	270,993	169,233	28,353	27,962	567	60,673
1895.....	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896.....	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897.....	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898.....	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899.....	11,625	197,732	204,004	2,907	24,037	923	18,460
1900.....	10,968	137,800	163,509	4,035	41,055	3,538	14,815
1901.....	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902.....	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903.....	25,998	259,031	210,758	14,656	7,911	4,904	13,994
1904.....	35,049	165,138	116,444	27,171	16,582	.....	13,184
1905.....	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906.....	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907.....	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908.....	23,209	732,131	127,402	31,172	33,423	6,667	21,668
1909.....	38,763	590,196	140,902	23,151	75,135	33	30,221

* Fiscal. † Apples, meal of all kinds, pease, potatoes.

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through the Welland Canal, during a period of thirty-nine years, ended Dec. 31, 1909.

HEAVY GOODS.							
Total.	Railway Iron.	Other Iron.	Salt.	Iron and Salt having paid full tolls on St. Lawrence Canals.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
503,860	46,806	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	.....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	.....	6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	.....	753	1,027	28,047	202,384	8,138	240,349
367,177	127	1,610	2,567	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	.....	243,690
591,409	.....	3,072	159	977	203,608	.....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	.....	201,261
720,183	1,444	11,722	799	734	162,336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	.....	8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488	.....	15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213,033
650,172	3,747	8,493	100	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267,212	25,040	317,143
975,672	35,726	429	316,921	18,904	371,080
898,401	87,025	377,681	33,301	498,007

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B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of thirty-nine years, ended December 31, 1909.
VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	44,110	310,090	119,541	3,920	.....	680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
1878	8,854	188,106	185,931	1,217	3,088	.....	2,100	389,296
1879	10,588	271,545	114,276	803	1,196	.....	2,387	430,795
1880	12,467	240,601	162,891	.....	477	.....	1,418	417,853
1881	9,655	121,393	103,075	252	.....	6	1,371	235,752
1882	12,205	205,876	54,797	537	.....	1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	114,090	117,536	618	1,116	.....	1,628	248,310
1886	19,418	146,151	218,897	.....	4,891	.....	14,581	403,928
1887	23,940	210,755	114,938	1,711	12,050	.....	12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894	33,628	270,514	169,233	28,353	27,962	.....	60,587	590,277
1895	43,895	202,636	164,894	8,689	18,236	.....	46,435	484,785
1896	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901	18,937	151,325	67,756	7,119	28,281	2,961	14,021	290,400
1902	22,282	223,499	67,647	7,418	11,223	4,079	12,912	349,060
1903	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904	35,046	164,515	116,444	27,171	16,582	.....	13,157	372,915
1905	38,512	247,599	180,921	55,432	36,072	1,711	9,882	570,129
1906	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,569
1908	23,187	730,751	127,402	31,172	33,423	6,667	21,668	974,270
1909	38,763	590,074	140,902	23,151	75,135	33	30,206	898,264

* Fiscal. † Apples, meal all kinds, pease, potatoes.

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C.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of thirty-nine years, ended December 31, 1909.

YEARS.	VEGETABLE FOOD.						HEAVY GOODS.							
	Fleur.	Wheat.	Corn.	Barley.	Oats.	Rye.	'Other articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	30,681	201,085	91,149	2,942	.....	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1872	10,482	124,695	89,761	1,391	7,400	.....	608	234,337	24,040	13,239	49,843	95,741	59,401	224,264
1873	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176
1874	8,230	229,053	125,627	.....	5,948	.....	5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1875	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	241,451
1876	5,187	96,247	58,138	.....	1,905	525	403	162,405	.....	5,531	29,395	167,110	25,808	227,844
1877	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975
1878	1,316	65,542	60,026	859	277	.....	341	128,361	.....	10,713	3,892	150,583	13,535	178,723
1879	159	53,791	33,401	.....	464	.....	11	87,826	2,405	3,648	6,318	118,573	17,797	148,741
1880	.....	30,611	16,122	1,551	296	.....	.....	48,580	4,743	3,515	371	65,945	18,380	92,954
1881	.....	34,320	30,031	924	.....	.....	10	65,285	1,313	5,570	.....	83,858	6,464	97,205
1882	107	30,227	32,433	537	.....	684	14	64,002	.....	4,076	.....	158,552	14,533	177,161
1883	2,041	54,382	66,128	735	731	.....	8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1884	1,715	40,956	53,707	.....	9,874	.....	8,170	114,422	698	599	.....	210,790	15,100	227,187
1885	124	53,235	63,229	732	882	.....	1	118,203	.....	1,594	.....	198,416	15,029	215,039
1886	7,591	53,258	94,048	.....	4,790	.....	13,201	172,888	156	5,328	1	189,964	11,364	206,813
1887	11,780	37,678	83,431	1,732	12,050	.....	10,859	157,530	15	4,406	.....	82,780	627	87,828
1888	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288
1889	5,017	39,229	147,045	.....	27,492	.....	17,225	236,208	.....	1,587	896	227,476	1,204	231,163
1890	9,204	31,527	180,842	6,519	27,030	.....	20,497	275,619	.....	504	208	162,231	1,620	184,563
1891	6,802	32,097	127,494	8,113	52,823	.....	26,115	253,444	.....	292	705	186,572	1,773	189,342
1892	11,018	26,950	131,222	6,433	36,935	.....	31,992	244,550	.....	576	2	183,895	.....	184,473
1893	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	.....	344	.....	200,827	.....	207,171
1894	17,795	53,846	105,329	28,095	27,621	.....	60,462	198,358	.....	297	.....	188,521	.....	188,818
1895	10,169	27,881	100,512	7,904	17,020	.....	46,316	209,802	181	246	.....	149,490	.....	149,917
1896	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	.....	146	.....	207,348	.....	207,494
1897	7,237	28,919	169,057	14,173	14,969	.....	41,887	276,242	965	15	.....	165,143	.....	166,123
1898	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814	.....	157,927
1899	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	.....	1,646	553	88,931	.....	91,481
1900	7,966	18,771	60,545	2,402	39,706	2,149	14,248	145,787	.....	953	.....	46,024	.....	46,977
1901	17,165	23,557	55,531	7,119	26,344	.....	14,016	143,732	.....	80	105	46,702	.....	46,970
1902	13,785	32,639	66,111	7,418	10,006	.....	12,675	142,634	.....	214	.....	12,911	.....	13,125
1903	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459	.....	.....	113,072	.....	113,535
1904	8,556	14,269	60,964	16,621	16,497	.....	13,079	129,986	.....	.....	.....	63,882	.....	63,882
1905	24,054	15,483	93,622	9,197	10,892	.....	9,682	162,930	.....	1	.....	73,464	.....	73,465
1906	15,215	13,410	135,240	9,266	11,323	.....	10,678	195,132	.....	169	.....	33,523	.....	33,692
1907	18,898	21,892	124,474	2,812	4,741	2	22,001	194,820	.....	80	.....	110,317	4,050	114,420
1908	17,694	24,651	99,830	7,148	2,070	2	21,393	172,788	.....	.....	.....	158,351	1,400	159,751
1909	15,452	17,940	100,967	4,224	22,683	161,266	5	131,131	1,531	132,667

Apples, meal all kinds, pease, potatoes.

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne, during the season of Navigation in 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908 and 1909.

ARTICLES.	CANADIAN VESSELS.				AMERICAN VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	126,398	104	59,532	354	355,702	195	108,720	869	650,352
1898.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	95,567		36,157		54,934		18,355		205,013	
Corn	56,538		30,455		284,059		66,761		437,813	
Barley					9,465		2,821		12,286	
Oats					17,329				17,329	
Pease	260				45				305	
Rye	3,564		1,480		9,135		1,948		16,127	
Coal	575		1,916		759		2,620		5,870	
Miscellaneous merchandise . .	19,385		4,104		47,271		8,758		79,518	
Shingles, woodenware, &c. .	2		9						11	
Sawed lumberFt. B.M	4,910,669		1,641,783		16,220,972		24,484,283		47,257,707	
Square timberCub. ft.	825,545		1,183,821				388,410		2,397,776	
FirewoodCords.										
StavesNo	249								249	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	91,901		80,928		16,250		7,244		196,323	
Corn	28,015		18,905		138,834		18,250		204,004	
Barley					2,424				2,424	
Oats	1,557				21,646				23,203	
Pease										
Rye					923				923	
Coal	435		6,736				3,398		10,569	
Miscellaneous merchandise . .	25,203		18,651		49,522		1,567		94,943	
Shingles, woodenware, &c. .	485		916				100		1,501	
Sawed lumberFt. B.M	2,077,748		772,739		14,855,338		19,949,079		37,654,904	
Square timberCub. ft.	322,138		585,780		20,802		328,806		1,257,526	
FirewoodCords.			9						9	
StavesNo										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	67,694		43,157		23,066		2,130		136,047	
Corn	39,597		31,248		78,701		13,963		163,509	
Barley					2,402		1,047		3,449	
Oats					39,706		407		40,113	
Pease	115				4				119	
Rye	1,389				2,149				3,538	
Coal	723		637		433		559		2,352	
Miscellaneous merchandise . .	53,649		31,536		43,344		3,564		132,093	
Shingles, woodenware, &c. .	1,078								1,078	
Sawed lumberFt. B.M	6,847,279		5,344,258		14,984,483		18,770,405		45,946,425	
Square timberCub. ft.	439,827		355,951		11,583		198,420		1,005,781	
FirewoodCords.	126		255						381	
StavesNo	1,000								1,000	

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c —*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	197	103,802	114	59,022	163	182,497	48	22,319	522	367,640
1901.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	57,641		58,973		31,955		1,241		149,810	
Corn	7,350		4,689		55,717		...		67,756	
Barley .....	...		...		7,119		...		7,119	
Oats	944		...		27,197		...		28,141	
Pease .....	...		...		...		...		...
Rye	2,961		...		...		...		2,961	
Coal	1,960		362		357		...		2,679	
Miscellaneous merchandise ..	71,300		32,312		12,874		7,469		123,955	
Shingles, woodenware, &c. ..	18		...		...		...		18	
Sawed lumber.....Ft. B.M.	6,533,423		4,060,251		11,089,806		13,092,940		34,776,420	
Square timber.....Cub. ft.	362,441		204,682		9,384		149,531		726,038	
Firewood	165		264		...		...		429	
Staves	No.		...		...		...		...
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	196	90,791	122	73,958	191	201,339	52	22,097	561	388,185
1902.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	82,954		85,973		52,889		...		221,816	
Corn	148		1,388		66,111		...		67,647	
Barley .....	...		...		7,418		...		7,418	
Oats	1,200		43		9,963		...		11,206	
Pease .....	...		...		...		...		...
Rye	3,808		...		271		...		4,079	
Coal	3,977		25,732		13,497		8,332		51,538	
Miscellaneous merchandise ..	33,111		8,723		38,351		1,594		81,779	
Shingles, woodenware, &c. ..	47		28		4		...		79	
Sawed lumber.....Ft. B.M.	13,218,960		3,256,187		25,437,287		19,540,426		61,452,860	
Square timber.....Cub. ft.	370,718		557,689		...		115,000		1,043,407	
Firewood	56		40		...		...		96	
Staves	No.		14,000		...		...		14,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	329	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	149,378		38,473		60,514		6,305		254,670	
Corn	21,356		4,682		174,588		10,132		210,758	
Barley	2,580		667		11,409		...		14,656	
Oats	306		1,335		6,112		...		7,753	
Pease	63		...		22		...		85	
Rye .....	...		...		4,904		...		4,904	
Coal	389		12,991		8,133		8,496		30,009	
Miscellaneous merchandise ..	39,563		3,367		41,584		2,000		86,514	
Shingles, woodenware, &c. ..	...		54		...		...		54	
Sawed lumber.....Ft. B.M.	12,841,552		1,625,855		17,871,652		14,733,677		47,072,736	
Square lumber.....Cub. ft.	572,000		660,000		...		84,200		1,316,200	
Firewood		210		9		...		219	
Staves	No.		641,000			641,000	

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	228	157,539	55	39,375	205	187,748	42	15,918	530	400,580
1904.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	116,794		33,302		14,269		.....		164,365	
Corn.....	12,768		7,814		95,862		.....		116,444	
Barley.....	2,619		824		23,728		.....		27,171	
Oats.....	.....		.....		16,261		.....		16,261	
Pease.....	.....		.....		3		.....		3	
Rye.....	1,925		7,187		17,133		7,668		33,913	
Coal.....	34,907		.....		1,925		.....		36,832	
Miscellaneous merchandise ..	29,567		.....		60,548		.....		90,115	
Shingles, woodenware, &c....	.....		.....		.....		.....		.....
Sawed lumber..... Ft. B.M.	15,077,382		854,811		32,754,541		9,572,655		58,259,389	
Square timber..... Cub. ft.	944,508		744,000		.....		149,000		1,837,508	
Firewood..... Corps.	.....		.....		717		.....		717	
Staves..... No.	634,000		.....		.....		.....		634,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	188,706		18,575		28,757		2,512		238,550	
Corn.....	6,385		6,636		163,374		4,526		180,921	
Barley.....	6,870		1,451		47,111		.....		55,432	
Oats.....	8,225		2,570		21,535		3,742		36,072	
Pease.....	.....		.....		76		.....		76	
Rye.....	.....		.....		1,711		.....		1,711	
Coal.....	18,756		35,324		28,330		8,678		91,088	
Iron ore.....	14,358		8,023		.....		.....		22,381	
Merchandise.....	29,375		7,485		74,975		3,126		114,961	
Shingles, woodenware, &c....	.....		2,748,941		2,325		.....		2,325	
Sawed lumber..... Ft. B.M.	2,867,147		.....		38,290,831		12,479,698		54,589,200	
Square timber..... Cub. ft.	355,000		951,524		.....		.....		538,000	
Firewood..... Cords	.....		183,000		900		.....		900	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	328	238,690	121	66,355	305	310,622	43	15,758	797	631,425
1906.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	250,493		34,355		35,578		.....		320,436	
Corn.....	8,177		.....		202,250		1,378		49,306	
Barley.....	8,546		5,046		17,854		.....		31,446	
Oats.....	21,900		16,083		11,323		.....		49,306	
Pease.....	.....		.....		11		.....		11	
Rye.....	.....		5		1,406		.....		1,411	
Coal.....	30,455		47,242		24,190		9,356		111,243	
Iron ore.....	5,862		.....		.....		.....		5,862	
Merchandise.....	55,583		7,009		110,263		50		152,705	
Shingles, woodenware, &c....	16		37		851		.....		904	
Sawed lumber..... Ft. B.M.	3,471,514		235,624		25,711,196		10,769,755		40,188,089	
Square timber..... Cub. ft.	375,000		200,000			575,000	
Firewood..... Cords	110		18		1,093			1,221	
Staves..... No.		300,000			300,000	

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	375	290,509	148	81,070	408	397,616	76	36,921	1,007	806,116
1907.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	294,298		50,808		130,818		4,429		480,303	
Corn.	6,713		514		259,895		4,571		271,693	
Barley ..	8,726		468		4,046				13,240	
Oats	49,689		16,647		7,033				73,369	
Pease					25				25	
Rye.					2,270				2,270	
Coal.	31,506		47,373		50,183		14,493		143,555	
Iron ore	12,040		8,956						20,990	
Merchandise.	21,545		9,436		5,231		6,235		42,447	
Shingles, woodenware, &c.					2,222				2,222	
Sawed lumber... Ft. B.M.					14,395,124		11,201,446		25,596,570	
Square timber Cub. ft.	558,090		323,000						881,090	
Firewood. Cords.					660				660	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
1908.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	505,151		39,001		183,101		3,498		730,751	
Corn.	2,405				124,997				127,402	
Barley.	19,775		1,133		10,264				31,172	
Oats.	30,091		643		2,689				33,423	
Pease.					40				40	
Rye.	742				5,925				6,667	
Coal.	39,733		42,656		57,448		8,344		148,181	
Merchandise.	26,815		14,783		14,410		13,686		69,694	
Firewood. Cords.			70		1,173				1,243	
Sawed lumber... Ft. B.M.					17,572,070		6,578,545		24,150,615	
Square timber. Cub. ft.	221,300		313,000						534,300	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	555	486,406	136	71,034	323	324,576	26	17,317	1040	899,333
1909.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	415,208		34,903		133,172				583,283	
Corn.	6,694				134,208				140,902	
Barley	17,943		360		4,848				23,151	
Oats.	70,392		4,743						75,135	
Pease.					63				63	
Rye.	33								33	
Coal.	160,475		53,681		21,097		630		235,883	
Merchandise.	52,994		14,782		12,232		16,498		96,506	
Sawed lumber... Ft. B.M.					31,643		10,214		41,857	
Square timber. Cub. ft.	3,450		7,840		125		1,475		12,800	

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WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

WELLAND CANAL—WEST BOUND FREIGHT.

THE total quantity of Through Freight passed Up the Welland Canal in Canadian and United States Vessels during the Season of Navigation in 1909 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels.....	302,704	
" sail ".....	18,089	
Total quantity in Canadian vessels.....		320,793
In United States steam vessels.....	312,276	
" sail ".....	7,948	
Total in United States vessels.....		320,224
Grand total freight passed Up the Welland Canal in Canadian and United States vessels.....		641,017

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1909.

Summary.	Tons.	Tons.
In Canadian steam vessels up	302,704	
" " down	802,515	
Total in Canadian steam vessels.....		1,105,219
In Canadian sail vessels up.....	18,089	
" " down.....	124,386	
Total in Canadian sail vessels.. ..		142,475
Total quantity in Canadian vessels....		1,247,694
In United States steam vessels up	312,276	
" " down.....	379,305	
Total in United States steam vessels.		691,581
In United States sail vessels up.....	7,948	
" " down.....	28,817	
Total in United States sail vessels.....		36,765
Total quantity in United States vessels.....		728,346
Total in Canadian and United States vessels.....		1,976,040
	Down or East Bound.	Up or West Bound.
In Canadian vessels.....	926,901	320,793
In United States vessels.....	408,122	320,224
Total.....	1,325,023	641,017

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence canals, to Montreal, during the Season of Navigation 1897 to 1909.

Articles.	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>													
Cement and water lime.....	38	52	15	15				35	22				5,652
Clay, lime and sand.....						50		8,170	10				
Iron, railway.....													
“ pig.....				508									
“ all other.....	7,564	6,217	5,063	4,292	1,178	5,785	2,542	1,651	384	269	124	553	12,689
Steel.....	375	1,351	3,000	5,420				16	48				
Stone, for cutting.....													
Apples.....													
Barley.....		3,960	596	1,288			2,206	9,697	43,607	21,196	9,936	24,318	19,143
Corn.....	267,583	310,498	150,999	109,359	14,319	1,719	123,864	55,021	84,204	55,559	105,984	10,454	17,137
Flaxseed.....	3,293	5,687			4,965		3,643	212	15,694	80,570	49,159	27,500	19,634
Flour.....	1,029	653	4,229	1,595	1,400	6,755	16,151	24,662	14,571	9,174	3,730	5,028	21,905
Meal, all kinds.....					35		348	57	270	60		156	
Oats.....	6,847	3,975	10,250	8,925	1,584	1,442	2,438		21,404	37,164	66,941	28,081	65,624
Oil cake.....					1,083		462	7,846	9,229				
Pease.....	2,078	260		115			63						30
Rye.....	8,435	15,488	923	3,078	2,961	4,079	4,260		1,711	1,405	2,266	6,662	120
Salt.....	216	144	183		50		132	615	168	75	143	419	
Seed, all kinds.....			200								20		
Hay, pressed.....			96		216								
Tobacco, raw.....	51				23								
Wheat.....	278,498	184,154	169,978	121,896	132,702	200,975	226,746	133,528	190,505	289,611	450,446	686,626	550,775
All other agricultural products, vegetables.....		56	32										5,876
Hides, skins, horns and hoofs.....								10		2			
Horses.....	1	4	1										
Lard and lard oil.....					1,155				2,847	4,810			
Meats, all kinds.....					114								
Pork.....					31		3		53			524	
Tallow.....													
All other agricultural products, animal.....								1					366
Total, class 3.....	576,008	532,499	345,565	256,491	161,849	220,805	382,858	241,522	384,727	499,895	688,749	790,321	718,951
<i>Class 4.</i>													
Agricultural implements.....			3		1,785	13	58	17					
Ashes.....	133	73	55	25	3		2	16					
Bricks.....												1,543	

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, &c.—*Concluded.*

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4. Con.</i>													
Crockery.....									93				
Furniture.....	1			1	5		3	6		6			
Glass, all kinds.....	53	75	16	6	1		15	3	21	11	4		
Molasses.....	9	56	159			54	240		820				
Nails.....			1				19		61			3	
Oil.....	112	1,141	7,143	15,647	14,987	12,091	14,619	12,848	20,700	19,995	22,111	30,002	31,149
Paint.....					17		5						
Pitch and tar.....									53		101		
Rags.....							4						
Rosin.....							20						
Soda ash.....					4				59	72	15		
Sugar.....	1,226				112				2,019				173
Tin.....								87	53				
Tobacco.....			96						201				
White lead.....				16									
Whisky, beer and other spirits.	46	4	74	11	32		2	766	635	611	1,224	1,056	525
Merchandise not enumerated.	1,226	866	518	92	2,420	419	582	713	851	466	2,294	2,126	10,418
Total, class 4.....	1,580	2,215	7,969	15,798	19,366	12,577	15,569	14,456	25,572	21,164	25,749	34,730	42,265
<i>Class 5.</i>													
Barrels, empty.....			1	182	66	15							
Hoops.....	257												
Sawed lumber.....	478	3,065	924	15,760	2,635	1,085			3,957	100			
Staves, pipe and barrel.....	4,716							394		2,400			
" West India and pipe.													
Timber, square, in vessels.								1,544	1,260	1,500	4,180		
" in rafts.....	1,207	329	26										900
Woodenware.....						17							
Total, class 5.....	6,658	3,394	951	15,942	3,265	1,117		1,938	5,217	4,000	4,180		900
<i>Special Class.</i>													
Coal.....									29,351	29,172	70,489	42,075	175,115
Iron ore.....						15,976		17,362	3,837			1,272	1,824
Stone, all kinds.....													
Total, special class.....									33,188	29,172	70,489	43,367	176,939
Grand total.....	584,246	538,108	354,485	28,231	184,420	250,475	398,427	275,278	448,704	554,231	789,167	869,398	939,055

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G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907 and 1909.

Articles.	1897.		1898.		1899.		1900.		1901.		1902.		1903.		1904.		1905.		1906.		1907.		1909.	
	Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.	
<i>Class 3.</i>																								
Bricks.....	70		70		24		49		196		22		80		115		132				556			
Brimestone.....									5		20		23		12									
Cement and water lime.....	837		996		997		1,931		2,916		178		3,924		39		181		88		13		400	
Clay, lime and sand.....	4		144		8		4		2		1		181								100			
Cotton, raw.....	10		9										23											
Fish.....					10		8		8				8		4						30			
Gypsum.....					1																			
Iron, railway.....							74		748		11,735		39,641		283		126		7,249		4,119			
" pig.....	6						3				558		273				312		680		7,655		7,231	
" all other.....	559		699		1,318		1,428		4,950		2,904		5,845				3,633		8,235		6,987			
Salt.....	25		35				48		75		4		87		99		150		17					
Steel.....			19		18				3		11		332		58		192		111		2,561		35,153	
Stone for cutting.....	62														41									
Flour.....									16								18				30		255	
Hay.....																								
Meals.....																								
Oats.....																								
Potatoes.....																								
Seeds, all kinds.....	121		56		121		218		302		58		325		164		35		17					
Tobacco, raw.....											1		2											
Agricultural products not enumerated, vegetables.....	4								1		1						127							
Hides and skins.....											16		6											
Horses.....			1																					
Lard and lard oil.....			2								11						28		20		1			
Meats other than pork.....													1								15			
Pork.....							1								25									
Wool.....																								
All other articles not enumerated.....																								
Total, class 3.	1,698		2,031		2,500		3,764		9,222		15,520		50,768		4,647		4,934		16,457		22,076		43,039	
<i>Class 4.</i>																								
Agricultural implements.....																								
Ashes, pot and pearl.....	1												2											
Crockery and earthenware.....	4		33		3		5						32		291		155		294		456			
Dye woods, &c.....															2								2	

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Class 4.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, &c.—*Continued.*

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>												
Furniture	2			1			1	5	2	1	35	
Glass, all kinds	799	150	299	456	612	1,384	1,207	1,671	1,641	2,519	3,534	
Manilla								34	93	37	15	
Marble										35		
Molasses					1		6		1		50	
Nails	129	229	548	50	675	1,292	2,878	2,009	3,061	4,011	3,331	
Oil, in barrels	12	15	21	74	83	14	16	1,418	120	148	155	1
Paint	20	35	2	12	69	97	158	202	367	412	295	
Pitch and tar	20	37	6	21	27	17	58	199	5	239		
Rags.			14			1	29		15		50	
Resin			15				1				25	
Soda ash	249	88	108	69	169	201	264	387	28	310	37	
Stone, wrought	25	31									5	
Sugar	311	566	1,596	430	810	1,314	204	52	1,168	1,153	6,046	40
Tin	359	237	159	117	338	506	209	362	928	1,365	1,173	
Turpenine					1	2	1				1	
White lead	5		1	4	11	37	80	82	80	304	283	
Whiting	104	93	89	39	49	61	22	33	158	93	18	
Whisky, beer, &c	93	98	178	295	131	182	452	432	384	483	1,040	220
Merchandise not enumerated	711	793	482	744	1,516	1,049	3,674	6,200	15,360	11,707	16,498	21,359
Total, class 4	2,844	2,405	3,491	2,417	4,492	6,169	9,294	13,379	23,566	23,116	33,049	21,620
<i>Class 5</i>												
Barrels, empty												
Firewood in vessels						3,600	40,026	40,425	43,982	54,906	2,337	
Palpwood										2,307	101,989	122,867
Latex, sawn, in vessels												3,984
Railway ties in vessels							611					
Woodenware										5		
Total, class 5						3,600	40,637	40,425	43,982	57,218	104,326	126,851
<i>Special Class.</i>												
Coal								10,200				
Iron ore								2,861				
Total, special class								13,061				
Grand total	4,542	4,436	5,991	6,211	13,714	25,289	100,699	71,512	72,482	90,791	159,451	191,510

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II.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1897 to 1909 inclusive.

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class A.</i>													
Bricks													
Cement and water lime	845	300		18									
Fish											20		
Iron, railway	965	770											
" all other		324	1,008	714		30			1	27	30		
Salt			549		105							9,086	
Steel		2,951	13,522	3,110						2	509		
Stone for cutting													
Apples													
Barley	14,173	6,909	2,421	2,462	7,119	7,418	11,433	16,621	9,197	9,296	2,812	7,148	4,224
Corn	169,057	150,067	81,777	60,545	55,531	66,111	108,917	60,964	93,622	135,240	124,474	99,830	100,967
Flour	7,237	4,212	6,118	7,906	17,168	13,785	6,082	8,556	24,054	15,215	18,898	17,094	
Hay, pressed	301								200				
Meal, all kinds	11,644	22,626	18,198	14,244	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,353	
Maple									87				
Nails									1				
Oil cake				2,705	1,302	110	740	16,497	228		114		
Oats	14,969	12,729	19,526	39,706	26,344	10,006	6,112	3	10,892	11,323	4,741	2,070	
Pease		15		1			22		76	11	25	40	63
Potatoes													
Rye		1,197	923	2,119			4,174			756		2	
Flax seed			200				1,594						
Seeds, all kinds	299	44	11			10	27		43	3	17		
Tobacco													
Wheat	28,919	11,268	12,926	18,771	23,557	32,639	15,436	14,269	15,483	13,419	21,892	24,651	17,940
Agricultural products, vegetables				6	10		1			1	7		
Hides and skins, &c.	23											21	315
Horses	3	2		4			2						
Lard and lard oil, &c.	1,444	3,671	864	1,588	1,680	2,413				22	86		
Meats, other than pork													
Pork	243	1,271	343	17	970	632	152	379	273	268	429		
Sleep												190	
Tallow		359	201	631	119								
Wool	197	80	130		3	752	482	131	21	89	30		157
Total, class A.	280,319	219,434	158,720		147,947	146,581	168,720	130,499	163,784	196,301	196,062	182,085	161,738
<i>Class B.</i>													
Agricultural implements						399		396	552	494		2	254
Crockery and earthenware											5		
Furniture		2	7		3	17				1			

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H. - STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the season of Navigation from 1897 to 1909 inclusive.—*Concluded.*

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>													
Marble					4								
Molasses			8	57									
Nails			11								3		
Oil, in barrels	198	119	367	17	22	1,594	2,000	1			8	15	
Paint		3	2	36				17	42	1	1		
Rags			1				4		4				
Soda ash													
Stone, wrought				154	448	280		53	53	840	26,075		1,196
Sugar	31								7		4		
White lead											21		
Whiting											30		
Whisky, beer and all other spirits		34	168	1	1		3						
Merchandise	3,591	3,828	6,219	7,889	3,327	1,928	2,010	1,554	2,008	2,324	41,021	1,857	5,866
Total, class 4	3,820	3,986	6,783	8,164	3,805	4,218	4,017	2,021	2,056	3,660	67,768	1,875	7,316
<i>Class 5.</i>													
Empty barrels				5	282				3	2	1		
Firewood, in vessels								717	2,700	3,609	1,980	3,509	
Lumber, sawn, in vessels	68,280	52,844	57,695	55,128	38,085	72,806	48,337	30,194	15,726	27,701	14,314	21,571	24,397
Masts and spars, in vessels	403							154	2,248		2,151	478	
Hop poles								652	62	53	70		
Railway ties, in vessels									12	1,500			
Shingles													
Split posts													
Staves, salt barrels													125
Timber, square, in vessels	1,040												2,932
Woodenware, &c.	1												
Total, class 5.	69,724	52,844	57,695	55,133	38,367	72,810	48,337	31,717	20,751	32,865	18,516	25,558	27,384
<i>Special class.</i>													
Coal		759	2,293	992	357	501		1,100	3,346	1,400	110,347		400
Stone, not suitable for cutting													
Kryolite											2,734		
Iron ore											1,316		
Total, special class		759	2,293	992	257	501		1,100	3,346	4,400	114,397		400
Grand total	353,863	277,023	225,491	218,969	190,476	224,110	221,074	165,337	190,517	237,226	396,743	209,518	196,838

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L STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1909.

Ports.	Wheat.	Oats.	Barley.	Corn.	Other Grain.	Total.	Total.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Tons.</i>
Kingston .	7,998,834	1,015,470	569,708	251,035	190,868	10,025,733	282,696
Prescott	70,800	82,118	.....		26,200	179,118	4,175
Ogdensburg				68,143		68,143	1,998
Total Bushels	8,069,634	1,097,588	569,708	319,178	216,886	10,272,994	
Total Tons	242,089	18,658	13,673	8,937	5,422		288,779

M.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1909 inclusive, as follows :—

Years.	From Canadian Ports to Canadian Ports.	From Canadian Ports to Canadian Ports.	From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885			193,442	4,974	10,321	31,350	240,087
1886			184,564	5,400	22,187	49,724	261,875
1887			81,617	1,163	26,775	25,968	135,523
1888			172,381	878	17,365	27,183	217,807
1889			226,352	1,124	12,036	25,931	265,443
1890	80		116,616	615	17,280	22,781	202,372
1891			185,190	1,382	17,374	20,698	224,644
1892			183,244	651	12,391	15,330	211,616
1893			204,704	2,123	8,325	17,944	233,096
1894			187,794	727	1,269	13,947	203,737
1895	4		148,887	603	1,565	7,807	158,866
1896	20	210	206,093	1,255	4,127	11,740	223,445
1897		4	165,143		1,277	9,799	176,223
1898			156,055	759	986	4,536	162,336
1899			86,638	2,293	525	8,276	97,732
1900	8		45,032	992		1,360	47,392
1901			46,345	357	456	2,322	49,480
1902			12,410	501	65	51,037	64,013
1903	3		113,076		4,796	30,009	147,884
1904	2,919		62,782	1,100	3,711	32,813	103,325
1905			70,118	3,346	11,436	37,742	172,642
1906	60		29,123	4,400	7,161	106,843	147,587
1907	2,857		110,347		10,453	143,555	267,212
1908	4,401		158,351		5,988	148,181	316,921
1909			130,731	400	11,067	235,483	377,681

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N.—STATEMENT showing the quantity of Coal passed though the whole length of the St. Lawrence Canal during the seasons of 1885 to 1909 inclusive.

Years.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down.
	Tons.	Tons.	Tons.
1885.	5,035	122,829	127,864
1886.	3,301	118,802	122,103
1887.	7,579	121,618	129,197
1888.	8,341	123,050	131,391
1889.	5,360	124,290	129,650
1890.	6,538	135,168	141,706
1891.	7,951	141,701	149,652
1892.	7,543	157,134	164,677
1893.	2,285	147,139	149,424
1894.	16,213	169,552	185,765
1895.		165,151	165,151
1896.	689	161,551	162,240
1897.	40	164,963	165,003
1898.	400	175,609	176,009
1899.	448	201,546	201,994
1900.	10	280,169	280,179
1901.	2,765	298,245	301,010
1902.	9,231	95,702	104,933
1903.	30	290,548	290,578
1904.	9,670	320,973	330,643
1905.	8,518	345,589	354,107
1906.	6,989	313,080	320,069
1907.	1,281	406,978	408,259
1908.	23,939	448,140	472,079
1909.	13,543	469,695	483,238

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C.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.

RECAPITULATION.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1898.	Tons.	Tons.	Tons.
Barley	3,960	1,417	6,909
Corn	310,498	13,338	116,317
Oats	3,975	625	12,729
Pease	260		45
Rye	16,133	39	
Wheat	184,706	15,860	8,612
Total grain	†519,532	31,279	144,612
Other articles	19,773	79,614	114,259
Total	539,305	110,893	258,871
1899.			
Barley	568		1,828
Corn	150,999	16,594	43,854
Oats	10,250	1	13,139
Pease			
Rye	923		
Wheat	169,978	24,602	9,190
Total grain	† 332,736	40,197	68,011
Other articles	21,739	68,671	104,727
Total	354,485	108,958	172,732
1900.			
Barley	1,288	563	1,598
Corn	109,358	9,844	44,406
Oats	8,925	348	30,840
Pease	115		4
Rye	3,078	160	300
Wheat	121,896	6,610	7,541
Total grain	**244,661	17,525	84,589
Other articles	43,670	95,680	93,287
Total	288,231	113,205	177,876
1901.			
Barley			
Corn	14,319	4,828	49,609
Oats	1,584	853	25,704
Pease			
Rye	2,961		
Wheat	132,702	8,051	9,057
Total grain	†151,566	13,732	83,370
Other articles	32,854	128,614	91,799
Total	184,420	142,346	175,169

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O.--STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

RECAPITULATION *Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1902.	Tons.	Tons.	Tons.
Barley.....	1,719	10,335	7,418
Corn.....	1,412		55,583
Oats.....			9,764
Pease.....	4,079		
Rye.....	200,975	12,452	8,389
Wheat.....			
Total grain	208,215	22,787	81,165
Other articles	42,260	32,946	179,914
Total.....	250,475	55,733	261,078
1903.			
Barley.....	2,206	1,017	11,433
Corn.....	116,223	13,846	80,689
Oats.....	2,438		5,315
Pease.....	63		22
Rye.....	4,200		644
Wheat.....	226,746	14,199	13,725
Total grain	351,936	29,062	111,828
Other articles.....	38,850	82,298	101,621
Total.....	390,786	111,360	213,449
1904.			
Barley.....	9,697	853	16,621
Corn.....	55,021	3,950	57,473
Oats.....			16,497
Pease.....			3
Rye.....			
Wheat.....	133,528	18,908	11,929
Total grain.....	198,246	23,711	102,523
Other articles.....	77,031	80,093	138,475
Total.....	375,277	103,803	240,998
1905.			
Barley.....	43,607	2,628	9,197
Corn.....	84,204	3,095	93,622
Oats.....	21,404	3,776	16,892
Pease.....			76
Rye.....	1,711		
Wheat.....	190,505	32,562	15,483
Total grain	**341,431	42,061	129,270
Other articles	107,273	123,225	104,747
Total.....	448,704	165,286	234,017

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O. STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Concluded.*RECAPITULATION *Concluded.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1906.	Tons.	Tons.	Tons.
Barley.....	21,196	984	9,266
Corn.....	55,559	15,688	140,558
Oats.....	37,164	819	11,323
Pease.....		11	
Rye.....	1,405	6	
Wheat.....	** 289,611	15,843	14,972
Total grain.....	404,935	33,351	176,119
Other articles.....	118,224	176,277	59,884
Total.....	523,159	209,628	236,003
1907.			
Barley.....	9,936	492	2,812
Corn.....	106,299	31,901	133,493
Oats.....	67,063	1,565	4,741
Pease.....			25
Rye.....	2,266	2	2
Wheat.....	*450,009	8,072	22,222
Total grain.....	635,573	42,032	163,295
Other articles.....	153,594	126,423	93,127
Total.....	789,167	168,455	256,422
1908.			
Barley.....	24,818	3,546	3,308
Corn.....	10,454	11,489	105,459
Oats.....	28,081	3,272	2,070
Pease.....			40
Rye.....	6,662	3	2
Wheat.....	†686,626	19,832	24,293
Total grain.....	756,141	38,142	135,172
Other articles.....	108,785	162,378	91,875
Total.....	864,926	200,520	227,047
1909.			
Barley.....	19,143		4,008
Corn.....	17,137	22,798	100,967
Oats.....	65,624	2,872	6,639
Pease.....	30		33
Rye.....	33		
Wheat.....	550,775	14,568	17,940
Total grain.....	652,742	40,238	129,587
Other articles.....	272,263	113,970	126,223
Total.....	925,005	154,208	255,810

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TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation in 1908 and 1909.

Canals.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
1908.													
Sault Ste. Marie.....	378,198	1,486,689	17,940	230,333	1,464,421	8,008,121	956,288	218,226	2,815,817	9,943,369	12,759,216	2,092,231	10,666,985
Welland	128,077	571,961	35,370	15,278	239,136	209,518	8,377	495,736	410,360	1,292,493	1,703,453	776,245	927,208
St. Lawrence.....	434,906	839,881	140,162	198	753	1,227	8,635	583,340	584,456	1,421,646	2,009,102	1,261,651	747,451
Chambly.....	4,160	10,730	364,771					123,612	368,934	134,342	503,276	379,674	123,602
St. Peter's.....	22,420	49,595							22,420	49,595	72,015	72,015	
Murray.....	6,717	5,380	492	6				13,306	7,209	18,692	25,901	12,595	13,306
Ottawa.....	2,358	226,623		28,855				691	2,358	256,169	258,527	258,527	
Rideau.....	39,570	31,713	1,998	4,051				12,308	41,568	48,072	89,640	77,519	12,121
Trent	11,840	69,850							11,840	69,850	81,690	81,690	
Grand total	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820	5,012,147	12,490,673
1909.													
Sault Ste. Marie.....	641,601	1,567,940	46,041	512,293	1,736,801	22,188,388	1,000,300	167,881	3,124,743	24,436,502	27,861,245	3,366,495	24,494,750
Welland	217,737	618,718	164,304	16,469	248,581	196,838	11,467	551,837	642,089	1,383,862	2,025,951	1,050,241	975,710
St. Lawrence.....	533,568	932,104	242,954	36,547	140		3,759	661,557	780,421	1,630,208	2,410,629	1,710,797	699,832
Chambly	5,480	11,475	606,466					128,696	611,946	140,171	752,117	623,421	128,696
St. Peter's	27,169	52,052					629		27,798	53,052	79,850	79,150	700
Murray.....	72,034	7,244	406				672	21,935	73,112	29,179	102,291	79,254	23,037
Ottawa.....	49,131	240,150	150	42,333			5,175		54,456	282,183	336,939	331,104	5,835
Rideau	44,126	33,633	394	252			1,827	12,148	46,341	45,433	91,774	77,643	14,131
Trent.....	17,819	42,133							17,819	42,133	59,952	59,952	
Grand total.....	1,608,659	3,504,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,678,725	28,042,023	33,720,748	7,378,657	26,342,691

TABLE 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation in 1909.

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
CANADIAN VESSELS.												
Steam and Sail.												
Sault Ste. Marie.. .. .	2,597	1,096,320	1,012,874	98,486	213,062	81,423	111,236	252,281	123,254	1,528,510	1,460,426	2,988,936
Welland	1,724	435,367	380,371	152,354	1,452	1,168	.. . . .	4,648	210,614	593,537	592,437	1,185,974
St. Lawrence	8,135	1,230,168	1,072,416	21,896	.. . . .	.. . . .	.. . . .	.. . . .	152,497	1,252,014	1,224,913	2,476,977
Chambly	670	32,721	34,194	16,075	.. . . .	.. . . .	.. . . .	.. . . .	14,545	48,796	48,739	97,535
Ottawa.....	1,935	181,226	179,934	157	3,399	.. . . .	.. . . .	766	502	182,149	183,835	365,984
Rideau.....	2,202	73,919	72,876	3,067	76	.. . . .	.. . . .	70	4,259	77,056	77,211	154,267
St. Peter's.....	1,428	50,694	51,729	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	50,614	51,729	102,343
Trent Valley	3,730	85,722	88,206	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	85,722	88,206	173,928
Murray.....	886	149,050	99,803	8,285	.. . . .	.. . . .	.. . . .	180	8,236	157,515	108,039	265,554
Total Canadian	22,507	3,335,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,043	3,835,535	7,811,578
UNITED STATES VESSELS.												
Sault Ste. Marie.....	3,734	144,118	83,507	55,615	180,573	3,902,156	10,228,683	197,837	58,249	4,299,726	10,551,012	14,850,738
Welland.....	709	859	1,139	61,457	6,902	267,395	200,005	4,911	135,216	334,622	343,262	677,884
St. Lawrence.....	1,136	115,486	20,956	120,844	40	8,789	906	93	222,118	245,212	244,020	489,232
Chambly	4,055	.. . . .	1,876	203,865	.. . . .	.. . . .	.. . . .	.. . . .	205,278	203,865	207,154	411,019
Ottawa.....	246	2,649	.. . . .	.. . . .	12,581	.. . . .	.. . . .	9,389	.. . . .	12,038	12,581	24,619
Rideau	34	198	1,022	10	99	.. . . .	.. . . .	712	13	920	1,134	2,054
St. Peter's	11	293	628	.. . . .	.. . . .	.. . . .	.. . . .	282	.. . . .	575	628	1,203
Trent Valley .. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .	.. . . .
Murray.....	71	289	279	386	7	38	20	526	1,029	1,238	1,335	2,573
Total United States	9,996	263,892	109,407	442,176	200,202	4,178,378	10,429,614	213,750	621,903	5,098,196	11,361,126	16,459,322
Grand Total Canadian and U. S.	32,503	3,599,079	3,101,810	742,496	418,191	4,260,969	10,540,850	471,695	1,135,810	9,074,239	15,196,661	24,270,900

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TABLE 3. —STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
SAULT STE. MARIE CANAL.					
Canadian Vessels, steam.	2,531	1,082,810	993,102	98,486	209,156
" " sail.	66	13,510	19,772		3,906
Total Canadian.	2,597	1,096,320	1,012,874	98,486	213,062
United States Vessels, steam.	3,679	136,221	83,127	55,615	176,566
" " sail.	55	7,897	380		4,007
Total United States	3,734	144,118	83,507	55,615	180,573
Grand total, Sault Ste. Marie Canal.	6,331	1,240,438	1,096,381	154,101	393,635
WELLAND CANAL.					
Canadian Vessels, steam.	1,150	375,866	325,428	114,631	1,452
" " sail.	574	59,501	54,943	37,723	
Total Canadian.	1,724	435,367	380,371	152,354	1,452
United States Vessels, steam.	652		1,079	48,401	4,653
" " sail.	57	859	60	13,056	2,249
Total United States.	709	859	1,139	61,457	6,902
Grand total, Welland Canal.	2,433	436,226	381,510	213,811	8,354
ST. LAWRENCE CANALS.					
Canadian Vessels, steam.	4,046	723,100	603,171	14,281	
" " sail.	4,089	507,068	469,245	7,615	
Total Canadian.	8,135	1,230,168	1,072,416	21,896	
United States Vessels, steam.	634	75,339	2,922	87,618	40
" " sail.	502	40,147	18,034	33,226	
Total United States.	1,136	115,486	20,956	120,844	40
Grand total, St. Lawrence Canals.	9,271	1,345,654	1,093,372	142,740	40
CHAMBLY CANAL.					
Canadian Vessels, steam.	278	28,511	28,536	135	
" " sail.	392	4,210	5,658	15,940	
Total Canadian.	670	32,721	34,194	16,075	
United States Vessels, steam.					
" " sail.	4,055		1,876	203,865	
Total United States.	4,055		1,876	203,865	
Grand total, Chambly Canal.	4,725	32,721	36,070	219,940	
OTTAWA CANALS					
Canadian vessels, steam.	901	83,684	86,759	157	1,007
" " sail.	1,034	97,542	93,175		2,392
Total Canadian.	1,935	181,226	179,934	157	3,399

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passed through the several Canals during the Season of Navigation in 1909.

From United States to United States Ports.		From United States to Canadian Ports		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
81,423	109,466	252,281	123,254	1,515,000	1,434,978	2,949,978
.....	1,770	.....	.....	13,510	25,448	38,958
81,423	111,236	252,281	123,254	1,528,510	1,460,426	2,988,936
3,870,252	10,169,548	195,591	58,249	4,257,679	10,487,490	14,745,169
31,904	59,135	2,246	.....	42,047	63,522	105,569
3,902,156	10,228,683	197,837	58,249	4,299,726	10,551,012	14,850,738
3,983,579	10,339,919	450,118	181,503	5,828,236	12,011,438	17,839,674
977	.....	4,460	166,827	495,934	493,707	989,641
191	.....	188	43,787	97,603	98,730	196,333
1,168	.....	4,648	210,614	593,537	592,437	1,185,974
263,284	198,355	3,147	121,513	314,832	325,600	640,432
4,111	1,650	1,764	13,703	19,790	17,662	37,452
267,395	200,005	4,911	135,216	334,622	343,262	677,884
268,563	200,005	9,559	345,830	928,159	935,659	1,863,858
.....	.....	.....	114,329	737,381	717,500	1,454,881
.....	.....	.....	38,168	514,683	507,413	1,022,096
.....	.....	.....	152,497	1,252,064	1,224,913	2,476,977
8,660	111	93	162,841	171,710	165,915	337,625
129	795	.....	59,276	73,502	78,105	151,607
8,789	906	93	222,118	245,212	244,020	489,232
8,789	906	93	374,615	1,497,276	1,468,932	2,966,209
.....	.....	.....	.....	28,646	28,536	57,182
.....	.....	.....	14,545	20,150	20,203	40,353
.....	.....	.....	14,545	48,796	48,739	97,535
.....	.....	.....	205,278	203,865	207,154	411,019
.....	.....	.....	205,278	203,865	207,154	411,019
.....	.....	.....	219,823	252,661	255,893	508,554
.....	294	98	84,135	87,864	171,999
.....	472	404	98,014	95,971	193,985
.....	766	502	182,149	183,835	365,984

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TABLE NO. 5.—STATEMENT showing the Number, Tonnage and Nationality of vessels
1909—

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
OTTAWA CANALS.					
United States vessels, steam	3	233			
sail	243	2,416			12,581
Total United States	246	2,649			12,581
Grand total, Ottawa Canals	2,181	183,871	179,934	157	15,980
RIDEAU CANAL.					
Canadian vessels, steam	1,775	57,222	57,419	3,067	76
sail	427	16,697	15,457		
Total Canadian	2,202	73,919	72,876	3,067	76
United States vessels, steam	2		10		
" sail	32	198	1,012	10	99
Total United States	34	198	1,022	10	99
Grand total, Rideau Canal	2,236	74,117	73,898	3,077	175
ST. PETER'S CANAL.					
Canadian vessels, steam	276	16,282	15,118		
" sail	1,152	34,412	36,611		
Total Canadian	1,428	50,694	51,729		
United States vessels, steam	8	215	502		
" sail	3	78	126		
Total United States	11	293	628		
Grand total, St. Peter's Canal	1,439	50,987	52,357		
TRENT VALLEY CANALS.					
Canadian vessels, steam	2,947	68,853	70,833		
" sail	783	16,869	17,373		
Total Canadian	3,730	85,722	88,206		
United States vessels, steam					
" sail					
Total United States					
Grand total, Trent Vallay Canals	3,680	85,722	88,206		
MURRAY CANAL.					
Canadian vessels, steam	652	137,790	88,847	3,347	
" sail	234	11,254	10,956	4,938	
Total Canadian	886	149,050	99,803	8,285	
United States vessels, steam	47	177	162	36	
" sail	24	114	117	349	7
Total United States	71	291	279	385	7
Grand total, Murray Canal	957	149,339	100,082	8,670	7

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passed through the several Canals during the Season of Navigation in
Continued.

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
				233		233
		9,389		11,805	12,581	24,386
		9,389		12,038	12,581	24,619
		10,155	502	194,187	196,416	390,603
		70	4,259	60,359	61,754	122,113
				16,697	15,457	32,154
		70	4,259	77,056	77,211	154,267
			3		13	13
		712	10	920	1,121	2,041
		712	13	920	1,134	2,054
		782	4,272	77,976	78,345	156,321
				16,282	15,118	31,400
				34,412	36,611	71,023
				50,694	51,729	102,423
				215	502	717
		282		360	126	486
		282		575	628	1,203
		282		51,269	52,357	103,626
				68,853	70,833	139,686
				16,869	17,373	34,242
				85,722	88,206	173,928
				85,722	88,206	173,928
			3,354	141,143	92,201	233,344
		180	4,882	16,372	15,838	32,210
		180	8,236	157,515	108,039	265,554
38	20	464	951	713	1,133	1,846
		62	78	525	202	727
38	20	526	1,029	1,238	1,335	2,573
38	20	706	9,265	158,753	109,374	268,127

TABLE 4. COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1908 and 1909.

Articles.	1908.	1909.	Increase.	Decrease.
<i>Class No. 1.</i>	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam.....	5,201,093	6,150,224	949,131	.....
" sail.....	1,579,696	1,661,354	81,658	.....
United States vessels, steam	7,881,570	15,726,035	7,844,465	.....
" sail	639,569	733,287	93,718	.....
Total, class No. 1	15,301,928	24,270,900	8,968,972	.....
<i>Class No. 2.</i>	No.	No.	No.	No.
Passengers.	280,830	272,222	.....	8,608
<i>Class No. 3.</i>	Tons.	Tons.	Tons.	Tons.
Barley.....	174,628	176,577	1,949	.....
Buckwheat.....	858	6,789	5,931	.....
Corn.....	153,713	180,203	26,490	.....
Oats.....	225,659	432,769	207,110	.....
Rye.....	26,661	7,688	.....	18,973
Flax.....	234,738	206,750	.....	27,988
Pease.....	286	326	40	.....
Wheat	3 199,031	3,397,567	198,536	.....
Flour	228,605	324,044	95,439	.....
Hay.....	18,259	36,503	18,244	.....
Other mill products.....	28,234	57,288	29,054	.....
Fruit and vegetables.....	23,838	15,036	.....	8,802
Potatoes.....	6,858	9,457	2,599	.....
Live stock.....	1,907	1,635	.....	272
Poultry, game, fish	2,220	3,064	844	.....
Dressed meats.....	106	573	467	.....
Other packing house products.....	2,273	3,201	928	.....
Hides and leather.....	101	594	493	.....
Wool	4	287	283	.....
All other animal products.. ..	10,177	14,947	4,770	.....
Total, class No. 3.....	4,338,156	4,875,298	593,177	56,035
<i>Class No. 4.</i>				
Agricultural implements.	11,378	18,836	7,458	.....
Cement, bricks, lime... ..	191,411	489,745	298,334	.....
Household goods and furniture.	4,718	2,517	.....	2,201
Iron, pig and bloom	52,952	98,667	45,715	.....
" and steel.....	227,284	309,188	81,904	.....
Petroleum and other oils	87,456	99,980	12,524	.....
Sugar and salt.. ..	22,709	104,474	81,765	.....
Wines, liquors and beers.....	10,193	18,314	8,121	.....
Merchandise not enumerated.....	542,029	723,680	181,651
Total, class No. 4.....	1,150,130	1,865,401	717,472	2,201

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TABLE 4.—COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1908 and 1909—*Concluded*.

Articles.	1908.	1909.	Increase.	Decrease.
<i>Class No. 5</i>	Tons.	Tons.	Tons.	Tons
Pulpwood..	467,306	883,937	416,631	..
Sawed lumber..	417,229	668,780	251,551	..
Squared timber..	53,072	31,772	..	21,300
Shingles	9,990	8,992	..	998
Other woods..	39,834	95,665	55,831	..
Total, class No. 5	987,431	1,689,146	724,013	22,298
<i>Class No. 6.</i>				
Hard coal.....	1,006,259	933,234	..	73,025
Soft coal.....	2,521,850	3,090,799	568,949	..
Coke.....	52	1,456	1,404	..
Copper ore.....	8,855	8,329	..	526
Iron ore.....	7,402,672	21,204,848	13,802,176	..
Other ore.....	87,415	52,237	..	35,178
Total, class No. 6	11,027,103	25,290,903	14,372,529	108,729
Grand total....	17,502,820	33,720,748	16,407,191	189,263

Net Increase, 16,217,928 tons.

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TABLE 5. STATEMENT of Traffic on the Undermentioned Canals during the Season of Navigation in 1909.

ARTICLES.	Sault Ste. Marie Canal.	Welland Canal.	St. Lawrence Canals.	Champlain Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Murray Canal.	Trent Valley Canal.
Class No. 1.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam	2,949,978	989,641	1,454,881	57,182	171,999	122,113	31,400	233,344	139,686
" " sail	38,958	196,333	1,022,096	10,353	193,985	32,154	71,023	32,210	34,242
United States vessels, steam	14,745,169	640,432	337,625		233	13	717	1,846	
" " sail	105,569	37,452	151,607	411,019	24,386	2,041	486	727	
Total, class No. 1	17,839,674	1,863,858	2,966,209	508,554	390,603	156,321	103,626	268,127	173,928
Class No. 2.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Passengers	32,810	3,092	97,371	2,979	21,731	19,498		24,368	70,373
Class No. 3.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Barley	133,708	23,151	19,255	17	59	30	5	348	4
Buckwheat	5,769		1,002		10	7	1		
Corn	5,562	140,902	33,535	48	47	102	4	3	
Oats	282,147	75,135	70,038	686	380	307	3,780	277	19
Rye	7,058	33	541		36		2		18
Flax	166,045	20,538	20,152	1	14				
Peas	69	63	106	18	3	1	2		64
Wheat	2,232,030	590,196	573,832	10	119	821			559
Flour	252,270	38,763	28,895	1,312	1,111	310	1,318		65
Hay	4,164	1,701	9,789	15,474	1,352	1,474	2,528		21
Other mill products	18,580	30,158	7,070	121	644	188	522	10	45
Fruit and vegetables	2,081	97	8,203	2,248	807	244	1,209	145	2
Potatoes	318		1,312	27	1,139	205	6,243	45	168
Live stock	5		1,013		526	12	15	6	58
Poultry, game, fish	62	230	119		112	8	2,532	1	
Dressed meats			309		13	18	8	225	
Other packing house products	78	427	1,540		239	269	286	320	42
Hides and leather	259	315	14		2	4			
Wool	70	157	10		10	17	1	20	2

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TABLE 6. — SUMMARY STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation ended December 31, 1909, showing the total quantity of each description of property passed through.

ARTICLES	Sault Ste. Marie Canal.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Murray Canal.	Trent Valley Canal.
Vessels of all kinds.	Tons. 17,839,674	Tons. 1,863,858	Tons. 2,966,209	Tons. 508,554	Tons. 390,603	Tons. 156,321	Tons. 103,626	Tons. 268,127	Tons. 173,928
Passengers.	No. 32,810	No. 3,092	No. 97,371	No. 2,979	No. 21,731	No. 19,498	No. 21,368	No. 70,373	No.
<i>Forest Produce of Wood.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Pulpwood	2,331	122,807	253,086	483,573	778	1,710	1	19,391	
Sawed lumber	47,789	45,881	232,771	114,671	197,040	18,931	5,631	318	5,745
Square timber	2,187	13,069	13,845		225	1	955	30	1,479
Shingles	7,206	298	145	23	439	253	506	2	120
Other woods.	11,616	4,490	9,310	1,063	33,543	5,832	1,317	304	28,151
Total	71,129	186,614	509,157	599,330	232,025	26,727	8,123	655	55,086
<i>Animals and Produce of Animals.</i>									
Live stock	5		1,013		526	12	15	6	58
Poultry, game and fish	62	230	119		112	8	2,532	1	
Dressed meats			309		13	18	8	225	
Other packing house products	78	427	1,540		239	269	286	320	42
Hides and leather	259	315	14		2	4			
Wool	70	151	10		10	17	1	20	2
All other animal products			9,872	430	2,833	1,402	205	118	87
Total	474	1,129	12,877	430	3,735	1,730	3,017	600	188

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Agricultural Products.

Barley	133,708	23,151	19,255	17	59	30	5	348	1
Buckwheat	5,760		1,002		10	7	1		
Corn	5,562	140,902	33,535	48	47	102	4	3	
Oats	282,147	75,135	70,038	686	380	307	3,780	277	19
Rye	7,058	33	541		36		2		18
Flax	166,045	20,538	20,152	1	14				
Pease	69	63	106	18	3	1	2		64
Wheat	2,232,030	590,196	573,832	10	119	821			59
Flour	2,32,270	38,763	28,895	1,312	1,111	310	1,318		65
Hay	4,164	1,701	9,789	15,474	1,352	1,474	2,528		21
Other mill products	18,580	30,158	7,070	121	644	138	522	10	45
Fruits and vegetables	2,081	97	8,203	2,248	807	244	1,209	145	2
Potatoes	318		1,312	27	1,139	205	6,243	45	168
Total	3,109,801	920,737	773,730	19,962	5,721	3,639	15,614	828	965

Manufactures.

Agricultural implements ..	8,163	9,574	449	71	233	285	2	35	24
Cement, bricks and lime ..	123,028	80,852	177,143	915	42,070	27,662	3,619	33,705	751
Household goods and furniture ..	63	16	1,644	23	160	146	135	265	65
Iron, pig and bloom	54,903	21,193	20,920	58	663	510	25	395	
Iron, steel, all other	154,530	65,832	84,010	606	1,250	1,172	139	1,635	14
Petroleum and other oils ..	11,062	48,352	37,641	188	878	710	445	685	19
Sugar and salt	36,044	46,671	10,839	885	4,262	3,639	1,778	340	16
Wines, liquors and beers ..	4,364	4,899	6,230	160	1,018	668	297	660	18
Merchandise not enumerated.	318,203	229,100	133,780	6,654	13,619	7,850	1,186	12,315	973
Total	710,360	506,489	472,656	9,560	64,153	42,642	7,626	50,035	1,880

Products of Mines.

Hard coal	361,318	143,328	313,709	98,533	4,706	9,447	287	1,245	61
Soft coal	2,435,781	234,853	326,058		26,005	6,186	41,014	21,360	42
Coke	1,440		2		2	12			
Copper ore	8,323						6		
Iron ore	21,156,915	31,770	1,848	14,144		2	158		11
Other ore	5,104	1,531	592	10,158	592	1,389	3,675	27,448	1,718
Total	23,969,181	410,982	642,209	122,835	31,305	17,036	45,140	50,083	1,832
Grand totals (passengers and tonnage of vessels not included)	27,861,245	2,025,951	2,410,629	752,117	336,939	91,774	79,850	102,291	59,952

TABLE 7 (No. 1)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Sault Ste. Marie Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements.....	8,133								30	8,133	30	8,163	
All others animal.....													
Barley.....	40	35,033								40	133,668	133,708	105,713
Buckwheat.....		5,769									5,769	5,769	5,769
Cement, bricks, etc.....	98,496	1,600			11,605					121,428	1,600	123,028	117,038
Coal, hard.....	32				270,006		91,880			361,918		361,918	5,990
" soft.....	102,775	6,400	5,000	3,500	1,376,276	30,080	888,250	23,500		2,372,301	63,480	2,435,781	361,918
Coke.....							1,440			1,440		1,440	2,435,781
Corn.....	12					3,931		1,619		12	5,550	5,562	1,440
Dressed meats.....													2,532
Flax.....		38,017											3,030
Flour.....	795	162,467				98,815					166,045	166,045	129,753
Fruits and vegetables.....	2,024		73	369	22	82,876	46	5,631		936	251,334	252,270	220,167
Hay.....	3,601	29	523		11					2,081		2,081	2,081
Hides and leather.....	6	213	39	1						4,135	29	4,164	4,164
Household goods.....	37	21	5							45	214	259	259
Iron, pig and bloom.....	36,338	2,434	60		3,212	2,935	9,924			42	21	63	63
Iron and steel, all other.....	90,406	30,801	584		32,245	6	392	96		19,534	5,369	54,903	48,916
Live stock.....	4	1								123,627	30,903	154,530	131,954
Merchandise.....	256,060	4,932	12,680	1,588	30,619	3,841	5,287			4	1	5	5
Oats.....		239,839		16,938		24,622		748		304,646	12,557	218,203	303,715
Other mill products.....	830	6,034		120		7,055		4,541			282,147	282,147	267,561
" packing house products.....		32	46							830	17,750	18,580	13,228
" woods.....	8,618	2,998								46	32	78	78
Ore, all other.....										8,618	2,998	11,616	11,255
" copper.....					1,367	3,737				1,367	3,737	5,104	
" iron.....		28,212		13,776		8,323		66,019			8,323	8,323	
Pease.....	41					21,018,908					21,156,915	21,156,915	3,339
Petroleum.....	6,372	1,237	362		30	28	5,011			41	28	69	41
Poultry, game and fish.....		62								9,825	1,237	11,062	6,756
Potatoes.....	273	17	28								62	62	62
										301	17	318	318

TABLE 7 (No. 2) —GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal during the Season of Navigation in 1909.—*Con.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.		Origin of cargo	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural implements	9,207	83						30	9,207	367	9,574	9,320	254	
All other animal		18,927				4,224				23,151	23,151	18,927	4,224	
Barley														
Buckwheat	54,379	13,900			6,804			5,769	61,183	19,669	80,852	69,727	11,125	
Cement, bricks, &c					130,731		11,067	1,530	141,798	1,530	143,328		143,328	
Coal, hard						400		233,953		234,353	234,353		234,353	
Coal, soft														
Coke														
Corn						100,967		39,935		140,902	140,902		140,902	
Dressed meats														
Flax		20,538								20,538	20,538	20,538		
Flour		20,661				15,452		2,650		38,763	38,763	20,254	18,509	
Fruits and vegetables	97								97		97	97		
Hay	1,701								1,701		1,701	1,701		
Hides and leather						515				315	315			315
Household goods	3	13							3	13	16	16		
Iron, pig and bloom	18,338	1,398						1,457	18,338	2,855	21,193	19,736	1,457	
Iron and steel, all other	46,285	8,355	1,133					10,054	47,418	18,414	65,832	55,841	9,991	
Live stock														
Merchandise	82,971	28,128	35,411		66,826	5,861	400	9,503	185,608	43,492	229,100	147,241	81,859	
Oats		72,263						2,872		75,135	75,135	74,234	904	
Other mill products	15	2,135				22,620		5,388	15	30,143	30,158	1,089	29,069	
" packing house products	25							402	25	402	427	25	402	
" woods	84	140				2,932		1,343	84	4,415	4,499	224	1,275	
Ore, all other					1,531				1,531		1,531		1,531	
" copper														
" iron								31,170		31,770	31,770		31,770	
Pease						63				63	63		63	
Petroleum	81	23,879	15					24,377	96	48,256	48,352	23,975	24,377	
Poultry, game and fish					230				230		230		230	

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TABLE 7 (No. 3).—GENERAL STATEMENT showing the Quantity of each through Article transported on the Welland Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements.	9,207	83					9,207	367	9,574	9,320	254
All other animal.											
Barley		18,927				254		23,151	23,151	18,927	4,224
Buckwheat											
Cement, bricks, &c.	54,379	300					61,183	6,069	67,252	56,127	11,125
Coal, hard.					130,731		141,798	1,530	143,328		143,328
" soft.						400		234,353	234,353		234,353
Coke.											
Corn.						100,967		140,902	140,902		140,902
Dressed meats.											
Flax.		20,538						20,538	20,538	20,538	
Flour.		20,661				15,152		38,763	38,763	20,254	18,509
Fruits and vegetables.	97						97		97	97	
Hay	1,701						1,701		1,701	1,701	
Hides and leather.						315		315	315		315
Household goods.	3	13					3	13	16	16	
Iron, pig and bloom.	18,338	1,398					18,338	2,405	20,743	19,736	1,007
Iron and steel, all other.	46,285	8,355	1,133			5	47,418	18,414	65,832	55,841	9,991
Live stock.											
Merchandise.	82,218	1,701	35,411		66,826	5,861	181,855	17,065	201,920	120,061	81,859
Oats.		72,263						75,135	75,135	74,231	904
Other mill products.	15	2,135				22,620	15	30,143	30,158	1,089	29,069
" packing house products.	25						25	402	427	25	402
" woods.						2,932		2,934	2,934		2,934
Ore, all other.					1,531		1,531		1,531		1,531
" copper.											
" iron.											
Pease.											
Petroleum.	81	23,879	15			43		31,770	31,770		31,770
Poultry, game and fish.								63	63		63
Potatoes.								48,256	48,352	23,975	24,377
Pulpwood.					230		230		230		230
Rye.		33									
Sawed lumber.	16		3,984	14,696		24,327	4,000	41,857	122,867	17,663	28,191

TABLE 7 (No. 5).—(GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals during the Season of Navigation in 1909.

Article.	From Canadian to Canadian Ports.				From Canadian to United States Ports.				From United States to United States Ports.				From United States to Canadian Ports.				Tons.		Origin of Cargo.	
	Up.		Down.		Up.		Down.		Up.		Down.		Up.		Down.		Up.	Down.	Canadian	United States.
Agricultural implements	305	144															305	144	449	1
All other animal	1,279	8,593															1,279	8,593	9,872	
Barley	88	19,167															88	19,167	19,255	
Buckwheat	984	18															984	18	1,002	
Cement, bricks, &c	84,946	87,212															84,946	92,197	177,143	5,439
Coal, hard	3,577	1,813															7,336	306,373	313,709	310,908
" soft	139,168	1,316															139,168	186,890	326,058	185,093
Coke	2																2		2	
Corn	2,960	20,803															2,960	30,575	33,535	17,473
Dressed meat	101	206															103	206	307	2
Flax	14	20,138															14	20,138	20,152	
Flour	2,097	24,439															2,097	26,798	28,895	2,099
Fruits and vegetables	1,426	6,750															1,428	6,775	8,203	27
Hay	7,363	2,426															7,363	2,426	9,789	
Hides and leather	7	5															9	5	12	2
Household goods	518	1,124															520	1,124	1,642	2
Iron—pig and bloom	20,399	521															20,399	521	20,813	107
Iron and steel, all other	67,658	9,815															67,658	16,352	77,473	6,637
Live stock	86	927															86	927	1,013	
Merchandise	104,879	24,262															104,931	28,849	124,449	9,331
Oats	297	69,741															297	69,741	70,038	
Other mill products	111	1,743															411	6,659	2,218	4,852
Other packing house products	573	507															649	891	1,071	469
Other woods	225	9,085															225	9,085	9,310	
Ore, all other	556	1,860															556	1,860	1,860	556
" copper																				
" iron	24	71															24	71	24	
Pease	35																35		106	
Petroleum	3,293	18,771															3,293	31,348	20,559	17,082
Poultry, game and fish	1	118															1	118	119	
Potatoes	357	955															357	955	1,312	
Pulpwood	18,923	685															252,401	685	253,086	
Rye	416	125															416	125	541	
Sawed lumber	37,578	149,170															47,054	185,717	232,771	

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TABLE 7 (No. 7).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the St. Lawrence Canals during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.		Down.		Up.		Down.		Up.	Down.		Canadian.	United States.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.					
Agricultural implements.....	205	61							205	61	266	265	1
All other animal	1,204	3,603							1,204	3,603	4,807	4,807	
Barley	88	24							88	24	112	112	
Buckwheat....	984	18							984	18	1,002	1,002	
Cement, bricks, &c.....	70,935	74,497							70,935	74,497	145,432	144,010	1,422
Coal, hard.....	2,870	202					2,063	11,591	1,933	11,793	16,726	2,094	14,632
" soft.....	128,028	1,316						10,459	128,028	11,775	139,803	129,925	9,978
Coke.....	2								2		2	2	
Corn.....	2,146	13,438							2,146	13,438	15,584	15,248	336
Dressed meats.....	33	6			2				25	6	31	29	2
Flax.....	14	504							14	504	518	518	
Flour.....	2,072	4,893							2,072	4,893	6,965	6,965	
Fruits and vegetables	1,382	761							1,384	761	2,145	2,143	2
Hay.....	5,662	2,426			2				5,662	2,426	8,088	8,088	
Hides and leather	7	5			2				9	5	14	12	2
Household goods.....	244	349			2				246	349	595	593	2
Iron—pig and bloom.....	1,173	416							1,173	416	1,589	1,482	107
Iron and steel, all other.....	25,456	835							25,456	835	26,291	26,291	
Live stock.....	81	895							81	895	976	976	
Merchandise	16,446	7,379			52				16,498	7,379	23,877	20,013	3,864
Oats	297	4,117							297	4,117	4,414	4,414	
Other mill products.....	364	783							364	783	1,147	1,147	
" packing house products.....	411	291			76				487	291	778	713	65
" woods.....	223	9,085							223	9,085	9,308	9,308	
Ore, all other.....	556	36							556	36	592	36	556
" copper.....													
" iron.....	24								24		24	24	
Pease.....	35	41							35	41	76	76	
Petroleum	2,206	216							2,206	216	2,422	1,022	1,400
Poultry, game and fish.....	1	112							1	112	113	113	
Potatoes.....	330	955							330	955	1,285	1,285	

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Pulpwood.....	675	685	2,904	685	3,589	3,589
Rye.....	416	5	416	5	421	421
Sawed lumber.....	36,341	149,170	36,341	185,717	222,058	222,058
Shingles.....	482	145	482	145	145	145
Squared timber.....	5,123	12,463	5,123	12,463	12,945	12,945
Sugar and salt.....	16,297	360	16,297	360	5,483	5,483
Wheat.....	1,084	6,010	1,084	6,010	22,307	22,307
Wines, liquors and beers.....		41		41	1,125	1,125
Wood.....		10		10	10	10
Total freight.....	223,887	296,153	328,315	354,750	83,065	650,696
						32,369

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TABLE 7 (No 8).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements	69	2							69	2	71		71	
All other animal	21	247						162	21	409	430		268	162
Barley	17								17		17		17	
Buckwheat														
Cement, bricks, &c.	478		146				291		624	291	915		624	291
Coal, hard	2						98,531		2	98,531	98,533		2	98,531
" soft														
Coke														
Corn	48								48		48		48	
Dressed meats														
Flax	1								1		1		1	
Flour	1,312								1,312		1,312		1,312	
Fruits and vegetables	669	1,579							669	1,579	2,248		2,248	
Hay		7,772	7,702						7,702	7,772	15,474		15,474	
Hides and leather														
Household goods	19	3					1		19	4	23		22	1
Iron-pig and bloom	52	6							52	6	58		58	
Iron and steel, all other	596	10							596	10	606		606	
Live stock														
Merchandise	836	467	172				5,239		1,008	5,646	6,654		1,415	5,239
Oats	17	669							17	669	686		686	
Other mill products	112	9							112	9	121		121	
Other packing house products														
Other woods	86	747							316	747	1,063		1,063	
Ore, all other	30						10,128		30	10,128	10,158		30	10,128
" copper														
" iron														
Pease	18						14,144			14,144	14,144		18	14,144
Petroleum	156							32	156	32	188		156	32

TABLE 7(No. 9).—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements.....	2										2		
All other animal.....	5	200									205		
Barley.....	5										5		
Buckwheat.....	1										1		
Cement, bricks, &c.....	756	2,863									3,619		
Coal, hard.....	147										287		211
Coal, soft.....	47	40,967									41,014		
Coke.....													
Corn.....	4										4		
Dressed meats.....	8										8		
Flax.....													
Flour.....	1,303	15									1,318		
Fruits and Vegetables.....	1,209										1,209		
Hay.....	2,528										2,528		
Hides and leather.....													
Household goods.....	14	121									135		
Iron-pig and bloom.....	22	3									25		
Iron and steel, all other.....	63	76									139		
Live stock.....	15										15		
Merchandise.....	988	194									1,182		4
Oats.....	3,780										3,780		
Other mill products.....	522										522		
Other packing house products.....	283	3									286		
Other woods.....	365	980									1,347		2
Ore, all other.....		3,603									3,603		72
" copper.....	6										6		
" iron.....	158										158		
Pease.....	2										2		
Petroleum.....	403	42									445		

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TABLE 7 (No. 10).—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements	30	5							30	5	35	35	
All other animal	27	91							27	91	118	118	
Barley		348								348	348	348	
Buckwheat													
Cement, bricks, &c.	32,825	880							32,825	880	33,705	33,705	
Coal, hard					672	573			672	573	1,245		1,245
Coal, soft						21,360				21,360	21,360		21,360
Coke													
Corn		3								3	3	3	
Dressed meats	65	160							65	160	225	225	
Flax													
Flour													
Fruits and vegetables	15	130							15	130	145	145	
Hay													
Hides and leather													
Household goods	207	58							207	58	265	265	
Iron-pig and bloom	370	25							370	25	395	395	
Iron and steel, all other	952	683							952	683	1,635	1,272	363
Live stock	4	2							4	2	6	6	
Merchandise	9,241	3,072				2			9,241	3,074	12,315	12,303	12
Oats		277								277	277	277	
Other mill products		10								10	10	10	
Other packing house products	165	155							165	155	320	320	
Other woods	100	204							304		304	304	
Org, all other	26,928	550							26,928	550	27,478	27,478	
" copier													
" iron													
Pease													
Petroleum	385	300							385	300	685	683	2
Poultry, game and fish	1								1		1	1	

TABLE 7 (No. 11).—GENERAL STATEMENT showing the quantity of each Article transported on the Ottawa Canals during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural implements.	194	39							194	39	233		233	
All other animal.	113	2,720							113	2,720	2,833		2,833	
Barley.	59								59		59		59	
Buckwheat.	10								10		10		10	
Cement, bricks, &c.	1,829	40,241							1,829	40,241	42,070		42,070	
Coal, hard.	784						3,922		4,706		4,706		124	4,582
" soft.	25,995	10							25,995	10	26,005		26,005	
Coke.	2								2		2		2	
Corn.	47								47		47		47	
Dressed meats.	7	6							7	6	13		13	
Flax.	14								14		14		14	
Flour.	1,017	94							1,017	94	1,111		1,111	
Fruits and vegetables.	307	500							307	500	807		807	
Hay.	106	1,246							106	1,246	1,352		1,352	
Hides and leather.		2								2	2		2	
Household goods.	106	54							106	54	160		160	
Iron-pig and bloom.	662	1							662	1	663		663	
Iron and steel, all other.	1,189	41	20						1,209	41	1,250		1,250	
Live stock.	29	497							29	497	526		526	
Merchandise.	9,120	3,782	20				697		9,837	3,782	13,619		12,922	697
Oats.	135	245							135	245	380		380	
Other mill products.	51	593							51	593	644		644	
Other packing house products.	207	22	10						217	22	239		239	
Other woods.		33,313		230						33,543	33,543		33,543	
Ore, all other.		36					556		556	36	592		36	556
" copper.														
" iron.														
Pease.	3								3		3		3	
Petroleum.	698	170	10						708	170	878		878	
Poultry, game and fish.		112								112	112		112	

TABLE 7 (No. 12).— (GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to Canadian Ports.		From United States to United States Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian	United States.
Agricultural implements.	188	97							188	97	285		285	
All other animal.	514	888							514	888	1,402		1,402	
Barley.		30								30	30		30	
Buckwheat.	7								7		7		7	
Cement, bricks, &c.	5,767	11,895							5,767	11,895	27,662		27,662	
Coal, hard.	189	157							1,976	7,471	9,447		205	9,242
" soft.	1,371	26							1,371	4,815	6,186		1,377	4,809
Coke.	12								12		12		12	
Corn.	2	60							2	100	102		62	40
Dressed meats.	13								13	5	18		18	
Flax.														
Flour.	67	243							67	243	310		310	
Fruit and vegetables.	159	45							199	45	244		204	49
Hay.	1,322	152							1,322	152	1,474		1,474	
Hides and leather.	2	2							2	2	4		4	
Household goods.	64	82							64	82	146		146	
Iron-pig and bloom.	394	116							394	116	510		510	
Iron and steel, all other.	1,081	91							1,081	91	1,172		1,172	
Live stock.	6	6							6	6	12		12	
Merchandise.	5,078	2,771							5,078	2,772	7,850		7,850	
Oats.	30	277							30	277	307		307	
Other mill products.	30	108							30	108	138		138	
Other packing house products.	203	66							203	66	269		269	
Other woods.	4,844	987							4,844	988	5,832		5,832	
Ore, all other.	369	950							4,844	950	1,389		1,389	
" copper.														
" iron.		2								2	2		2	
Pease.		1								1	1		1	

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Petroleum.....	449	261	449	261	710	710
Poultry, game and fish	8	8	8	8
Potatoes.....	179	26	179	26	205	205
Pulpwood	84	1,626	.....	.....	.....	84	1,626	1,710	1,710	.....
Rye.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sawn lumber	7,615	10,737	.....	.....	.....	7,939	10,992	18,931	18,931	.....
Shingles.....	178	75	.....	.....	3	178	75	253	253	.....
Squared timber.....	1	.....	.....	.....	.....	1	.....	1	1	.....
Sugar and salt.....	3,281	358	.....	.....	.....	3,281	358	3,639	3,639	.....
Wheat.....	15	806	.....	.....	.....	15	806	821	821	.....
Wines, liquors and beers.....	597	71	.....	.....	.....	597	71	668	668	.....
Wool	1	16	.....	.....	.....	1	16	17	17	.....
Total freight.....	44,120	33,033	.....	.....	1,827	46,341	45,433	91,774	77,643	14,131

TABLE 7 (No. 13).—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals during the Season of Navigation in 1909.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			Canadian.	United States.
Agricultural implements.	4	20							4	20			24	
All other animal.	34	53							34	53			87	
Barley.	4								4				4	
Buckwheat.														
Cement, bricks, &c.	527	224							527	224			751	
Coal, hard.	37	24							37	24			61	
" soft.	42								42				42	
Coke.														
Corn.														
Dressed meats.														
Flax.	44	21							44	21			65	
Flour.	2								2				2	
Fruits and vegetables.	21								21				21	
Hay.														
Hides and leather.														
Household goods.	45	20							45	20			65	
Iron-pig and bloom.														
Iron and steel, all other.	14								14				14	
Live stock.	45	13							45	13			58	
Merchandise.	637	336							637	336			973	
Oats.	19								19				19	
Other mill products.	16	29							16	29			45	
Other packing house products.	42								42				42	
Other woods.	13,179	14,972							13,179	14,972			28,151	
Ore, all other.	4	1,714							4	1,714			1,718	
" copper.														
" iron.	11								11				11	
Pease.	64								64				64	
Petroleum.	15	4							15	4			19	
Poultry, game and fish.														
Potatoes.	167	1							167	1			168	

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Pulpwood.....	539	19,052	19,052	19,591	19,591
Rye.....	18			18	18
Sawed lumber.....	1,044	4,701	4,701	5,745	5,745
Shingles.....	45	75	75	120	120
Squared timber.....	631	848	848	1,479	1,479
Sugar and salt.....	14	2	2	16	16
Wheat.....	559			559	559
Wines, liquors and beers.....	10	8	8	18	18
Wool.....		2	2	2	2
Total freight.....	17,819	42,133	42,133	59,952	59,952

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TABLE 8.—STATEMENT showing the Classified Tonnage of all kinds of Vessels passed

SAULT STE.

CANADIAN.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 5,142 tons.	1	5,142	1	5,000 to — tons.		
2	4,000 " 5,000 "	1	4,361	2	4,000 " 5,000 "		
3	3,000 " 4,000 "	2	6,775	3	3,000 " 4,000 "		
4	2,000 " 3,000 "	6	17,333	4	2,000 " 3,000 "		
5	1,000 " 2,000 "	57	75,254	5	1,000 " 2,000 "		
6	Under 1,000 "	61	20,278	6	Under 1,000 "	4	3,244
	Total	128	129,143		Total	4	3,244

WELLAND

1	250 to 1,579 tons	66	61,058	1	250 to 989 tons	14	7,585
2	200 " 249 "	2	430	2	200 " 249 "	3	675
3	150 " 199 "	4	675	3	150 " 199 "	4	670
4	100 " 149 "	4	450	4	100 " 149 "	6	600
5	50 " 99 "	6	460	5	50 " 99 "	1	50
6	Under 50 "	15	625	6	Under 50 "	1	15
	Total	97	63,698		Total	29	9,595

ST. LAWRENCE

1	250 to 1,597 tons	46	48,242	1	250 to 1,184 tons	79	33,141
2	200 " 249 "	7	1,520	2	200 " 249 "	7	1,475
3	150 " 199 "	7	1,145	3	150 " 199 "	59	9,605
4	100 " 149 "	10	1,185	4	100 " 149 "	87	10,525
5	50 " 99 "	22	1,625	5	50 " 99 "	64	5,055
6	Under 50 "	36	706	6	Under 50 "	6	255
	Total	128	54,423		Total	302	60,056

RIDEAU, OTTAWA AND

1	250 to 372 tons	4	1,334	1	250 to — tons		
2	200 " 249 "			2	200 " 149 "	5	1,025
3	150 " 200 "	1	185	3	150 " 200 "	39	6,375
4	100 " 149 "	1	100	4	100 " 149 "	52	6,650
5	50 " 99 "	8	530	5	50 " 99 "	17	1,290
6	Under 50 "	36	609	6	Under 50 "	11	286
	Total	50	2,758		Total	124	15,626

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through the following Canals during the Season of Navigation in 1909.

MARIE CANAL.

UNITED STATES.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 6,498 tons.	50	270,666	1	5,000 to ----- tons	3	13,839
2	4,000 " 5,000 "	77	308,184	2	4,000 " 4,725 "	6	19,540
3	3,000 " 4,000 "	137	464,262	3	3,000 " 4,000 "	6	14,962
4	2,000 " 3,000 "	45	123,158	4	2,000 " 3,000 "	5	7,148
5	1,000 " 2,000 "	59	96,016	5	1,000 " 2,000 "	6	3,348
6	Under 1,000 "	51	19,905	6	Under 1,000 "	26	58,837
Total.		419	1,282,191				

CANAL.

1	250 to 1,673 tons	55	49,912	1	250 to 1,310 tons	10	1,925
2	200 " 249 "	2	340	2	200 " 249 "	1	200
3	150 " 199 "	1	120	3	150 " 199 "	4	290
4	100 " 149 "	9	750	5	50 " 99 "	1	35
5	50 " 99 "	17	420	6	Under 50 "	17	2,610
6	Under 50 "	84	51,542				

CANALS.

1	250 to 1,609 tons	29	24,552	1	250 to 796 tons	10	5,256
2	200 " 249 "	1	135	2	200 " 249 "	41	4,430
3	150 " 199 "	3	235	3	150 " 199 "	88	8,240
4	100 " 149 "	4	88	4	100 " 149 "	3	63
5	50 " 99 "	25,010		5	50 " 99 "	142	17,989
6	Under 50 "			6	Under 50 "		

CHAMBLY CANALS.

1	250 to — tons	1	250 to — tons	1	250 to — tons		
2	200 " 249 "	2	200 " 249 "	2	200 " 249 "	9	1,410
3	150 " 200 "	3	150 " 200 "	3	150 " 200 "	440	45,905
4	100 " 149 "	4	100 " 149 "	4	100 " 149 "	199	18,630
5	50 " 99 "	5	50 " 99 "	5	50 " 99 "	2	23
6	Under 50 "	9	174	6	Under 50 "	650	65,968
Total		9	174	Total			

APPENDIX

DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)

	Miles.
1. Lachine canal... ..	8½
Lake St. Louis and River St. Lawrence... ..	16
2. Soulanges' canal... ..	14
Lake St. Francis and River St. Lawrence... ..	33
3. Cornwall canal... ..	11
River St. Lawrence... ..	5
4. Farran's Point canal... ..	1½
River St. Lawrence... ..	10
5. Rapide Plat canal... ..	3¾
River St. Lawrence... ..	4
6. Galops canal... ..	7½
River St. Lawrence and Lake Ontario... ..	236
7. Welland canal... ..	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal... ..	1¼
Lake Superior to Port Arthur... ..	266
Total... ..	1,223½
To Duluth... ..	1,357
Chicago... ..	1,286

Second.—Ottawa to Lake Champlain.

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

Third.—Ottawa to Kingston and Perth.

1. Rideau canal.

Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.

1. Trent canal (not completed).

Fifth.—Ocean to Bras d'Or lakes.

1. St. Peter's canal.

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RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

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LACHINE CANAL.

First construction commenced.....	1821
“ completed.....	1825
First enlargement commenced.....	1843
“ completed.....	1848
Second enlargement commenced.....	1873
“ completed.....	1901
Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimensions of locks.....	270 feet by 45 feet.
Total rise of lockage.....	45 feet.
Depth of water {at two locks.....	18 “
on sills. {at three locks.....	14 “
Average width of new canal.....	150 “

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Construction commenced.....	1892
Open for traffic.....	1899
Length of canal.....	14 statute miles.
Number of locks {lift.....	4
{guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise of lockage.....	84 feet
Depth of water on sills.....	15 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “
Number of arc lights.....	219 of 2,000 c. p. each.

The canal extends from Cascade point to Coteau Landing, overcoming the Cascade Rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

CORNWALL CANAL.

First commenced, 9 feet.....	1844
“ opened.....	1847
Enlargement commenced.....	1897
“ completed.....	1900
Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 75 feet.
Total rise of lockage.....	48 feet.
Depth of water on sills.....	14 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “

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The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis, of 32¼ miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

FARRAN'S POINT CANAL.

First commenced, 9 feet	1844
“ opened	1847
Enlargement commenced.. .. .	1897
“ completed.. .. .	1900
Length of canal.. .. .	1½ miles.
Number of locks	1
New lock	800 feet by 45 feet
Old lock	200 “
Total rise or lockages	3½ feet.
Depth of water on sills of new lock	14 “
Depth of water on sills of old lock	9 “
Breadth of canal at bottom	90 “
Breadth of canal at water surface.. .. .	154 “

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

First commenced, 9 feet	1844
“ opened	1847
Enlargement commenced	1884
“ completed	1897
Length of canal.. .. .	3¾ miles.
Number of locks	2
Dimensions of locks	270 feet by 45 feet.
Total rise in lockage.. .. .	11½ feet.
Depth of water on sills.. .. .	14 “
Breadth of canal at bottom.. .. .	80 “
Breadth of canal at surface of water.	152 “

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal, there is a navigable stretch of 10½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

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GALOPS CANAL.

First commenced, 9 feet.....	1844
Opened.....	1846
Enlargement commenced.....	1888
" completed.....	1903
Length of canal.....	7½ miles.
Number of locks.....	3
Dimensions of locks. { one of which is }	2-270 by 45.
{ a guard lock. }	1-800 by 45.
Total rise of lockage.....	15½ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Construction begun.....	1882
Completed.....	1890
Length between eastern and western pier heads.....	5½ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120
Depth below lowest known lake level.....	11
No locks.	

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinte and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

	Old Line.	Enlarged or New Line.
Length of Canal..	27½ miles	26¾ miles
Pairs of guard-gates (formerly 3)		2
Number of locks { lift.....	26	25
{ guard.....	1	1
Dimensions..... { 1 lock 200 x 45 { 1 lock 200 x 45 { 1 (tidal) 230 x 45 { 24 locks 150 x 45 }		270 feet x 45 feet.
Total rise or lockage	326¾ feet	326¾ feet.
Depth of water on sills..	10½ "	14 "
Construction commenced, 10 feet 3 inches..		1824
" Completed..		1833
Enlargement commenced, 14 feet..		1872
" completed..		1887

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WELLAND RIVER BRANCHES.

Length of canal—

Port Robinson cut to River Welland	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct	300 "
Chippewa cut to River Niagara.. .. .	1,020 "
Number of locks—one at Aqueduct and one at Port Robinson.. .. .	2
Dimensions of locks.. .. .	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland.. .. .	10 feet.
Depth of water on sills.. .. .	9 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal	21 miles.
Number of locks.. .. .	2 "
Dimensions of locks.	{ 1 of 150 by 26½ feet. 1 of 200 by 45 feet.
Total rise or lockage	
Depth of water on sills.. .. .	7 to 8 feet.
	9 feet.

PORT WELLAND BRANCH.

Length of canal	1¾ miles.
Number of locks.. .. .	1
Dimensions of locks	185 feet by 45 feet.
Total rise or lockage	7½ feet.
Depth of water on sills.. .. .	11 "

The Welland canal has two entrances from Lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Construction commenced.. .. .	1888
Opened for traffic.. .. .	1895
Length of canal, between the extreme ends of the entrance piers.. .. .	5,967 feet.
Number of locks.. .. .	1
Dimensions of locks.. .. .	900 feet by 60 feet.
Depth of water on sills (at lowest known water level)	20 feet 3 inches.
Total rise or lockage.. .. .	18 feet.
Breadth of canal at bottom	141 feet 8 inches.
Breadth at surface of water	150 feet.

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This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245½ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

Ottawa River Canals.

The Ste. Anne's lock.
Carillon canal.

Grenville canal.
Rideau canal.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Interme- diate Distance.	Total Distance, from Montreal.
	Miles.	Miles.
The Lachine canal.....	8½	
From Lachine to Ste. Anne's lock.....	15	23
Ste. Anne's lock and piers.....	1	23
Ste. Anne's lock to Carillon canal.....	27	50
The Carillon canal.....	1	51
The Carillon to Grenville canal.....	6½	57
The Grenville canal.....	5½	63
From the Grenville canal to entrance of Rideau navigation.....	56	119
Rideau navigation ending at Kingston.....	126½	245

STE. ANNE'S LOCK.

Construction commenced..	1814.
“ completed..	1816
Rebuilt of wood..	1833
“ in masonry..	1843.

	Old Lock.	New Lock.
Length of canal..	½ mile.	½ mile.
Number of locks..	1	1
Dimensions of locks..	190 x 45 feet.	200 x 45 feet.
Total rise or lockage..	3 feet.	3 feet.
Depth of water on sills..	6 “	9 “

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

THE CARILLON CANAL.

Construction commenced.. . . .	1819
“ completed.. . . .	1833
Enlargement commenced.. . . .	1871
“ completed.. . . .	1887
Length of canal.. . . .	$\frac{3}{4}$ mile.
Number of locks.. . . .	2
Dimensions of locks.. . . .	200 x 45 feet.
Total rise or lockage.. . . .	16 feet.
Depth of water on sills.. . . .	9 “
Breadth of canal at bottom.. . . .	100 “
Breadth of canal at water surface.. . . .	110 “

This canal overcomes the Carillon rapids.

From Ste. Anne's lock to the foot of the Carillon canal there is navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.
By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Construction commenced.. . . .	1819
“ completed.. . . .	1833
Enlargement commenced.. . . .	1871
“ completed.. . . .	1887
Length of canal.. . . .	$5\frac{3}{4}$ miles.
Number of locks.. . . .	5
Dimensions of locks.. . . .	200 x 45 feet.
Total rise or lockage.. . . .	43 $\frac{3}{4}$ feet.
Depth of water on sills.. . . .	9 “
Breadth of canal at bottom.. . . .	40 to 50 feet.
Breadth of canal at surface of water.. . . .	50 to 80 “

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

Construction commenced.. . . .	1826
“ completed.. . . .	1832

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters.. . . .	126 $\frac{1}{2}$ miles.
Number of locks going from Ottawa to Kingston.	{ 35 ascending. 14 descending.
Total lockage.....446 $\frac{1}{2}$ feet	{ 282 $\frac{1}{2}$ rise and 164 fall } at high water.
Dimensions of locks.. . . .	134 x 33 feet.
Depth of water on sills.. . . .	5 feet.
Navigation depth through the several reaches.. . .	4 $\frac{1}{2}$ “
Breadth of canal reaches at bottom.. . . .	{ 60 feet in earth. 54 feet in rock.
Breadth of canal at surface of water.. . . .	80 feet in earth.

PERTH BRANCH.

Construction commenced..	1883
“ completed..	1892
Length of canal..	7 miles.
Number of locks..	2
Dimensions of locks..	134 feet x 33 feet.
Total rise or lockage..	26 “
Depth of water on sills..	5 “ 6 inches.
Length of dam..	200 “
Breadth of canal at bottom..	40 “
Breadth of canal at surface of water..	{ 40 “ in rock. 60 “ in clay.

The Perth branch of the Rideau canal affords communication between Beveridge’s bay, on Lake Rideau and the town of Perth.

The summit level of the Rideau system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

- 1. The summit level, supplied by the Wolfe lake system.
- 2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau.
- 3. The southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of Lake Lough-boro’, flow into Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through the St. Ours lock to the basin of Chambly; thence, by the Chambly canal, to St. Johns, and up the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York:—

Section of Navigation.	Interme- diate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours lock	14	14
St. Ours lock to Chambly canal.	32	46
Chambly canal.	12	58
Chambly canal to boundary line	23	81
Boundary line to Champlain canal.	111	192
Champlain canal to junction with Erie canal	66	258
Erie canal, from junction to Albany.	7	265
Albany to New York	146	411

ST. OURS LOCK DAM.

Construction commenced.. . . .	1844
“ completed.. . . .	1849
Length.. . . .	$\frac{1}{8}$ mile.
Number of locks.. . . .	1 “
Dimensions of lock.. . . .	200 feet by 45 feet.
Total rise of lockage.. . . .	5 “
Depth of water on sills.. . . .	7 feet at low water.
Length of dam in eastern channel.. . . .	300 “
Length of dam in western channel.. . . .	690 “

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Construction commenced.. . . .	1831
“ completed.. . . .	1843
Length of canal.. . . .	12 miles.
Number of locks.. . . .	9
Dimensions of locks:—	
Guard lock, No. 1 at St. Johns.....	122 feet.
Lift “ 2	124 “
“ “ 3, 4, 5, 6	118 “
“ “ 7, 8, 9 combined	125 “
Total rise or lockage.. . . .	74 “
Depth of water on sills.. . . .	7 “
Breadth of canal at bottom.. . . .	36 “
Breadth of canal at surface of water.. . . .	60 “

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

TRENT CANAL.

The term ‘Trent canal’ is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian bay, Lake Huron; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these

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waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:—

From Trenton, Bay of Quinté to Nine Mile rapids ..	—	9
Nine Mile rapids to Percy landing... ..	19½	—
Percy landing to Heeley's Falls dam... ..	—	14½
Heeley's Falls dam to Peterborough... ..	51½	—
Peterborough to Lakefield... ..	—	9½
Lakefield to a point across Balsam lake... ..	61	—
	<hr/> 132½	<hr/> 33

Total distance, Bay of Quinté to a point across Balsam lake.. 165½

From Sturgeon point on Sturgeon lake, 48½ miles from Lakefield, the branch through the town of Lindsay to Port

Perry at the head of Lake Scugog... .. 27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchewanoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2½ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15½ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1	Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill.		
2	Locks at Fenelon.... ..	134' x 33' x 5' 0" to 7' 6" depth water on mitre sill.	
1	" Lindsay	134' x 33' x 5' 0" to 7' 6"	" "
1	" Bobcaygeon	134' x 33' x 5' 8" to 7' 0"	" "
1	" Buckhorn	134' x 33' x 5' 0" to 9' 0"	" "
1	" Lovesick	134' x 33' x 5' 0" to 9' 4"	" "
2	" Burleigh	134' x 33' x 6' 0" to 8' 0"	" "
1	" Young's point.	134' x 33' x 5' 0" to 14' 0"	" "
1	" Peterborough .	134' x 33' x 5' 0" to 10' 0"	" "
1	" Hastings	134' x 33' x 7' 0" to 10' 6"	" "
1	" Chisholms	134' x 33' x 5' 0" to 8' 6"	" "

ST. PETER'S CANAL, CAPE BRETON.

Construction commenced.. . . .	1854
" completed.. . . .	1869
Enlargement begun.. . . .	1875
" completed.. . . .	1881
Length of canal.. . . .	About 2,400 feet.
Breadth at water line.. . . .	50 feet.
Lock.. . . .	One tidal lock, 4 pairs of gates.
Dimensions.. . . .	200 feet by 48 feet.
Depth of water on sills.. . . .	18 feet at lowest water.
Depth through canal.. . . .	19 "
Extreme rise and fall of tide in St. Peter's bay.. . . .	4 "

This canal connects St. Peter's bay on the northern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

BEAUHARNOIS CANAL.

Construction begun.. . . .	1842
" completed.. . . .	1845
Length of canal.. . . .	12 statute miles.
Number of locks.. . . .	9
Dimensions of locks.. . . .	200 feet by 45 feet.
Total rise or lockage.. . . .	82½ "
Depth of water on sills.. . . .	9 "
Breadth of canal at bottom.. . . .	80 "
Breadth of canal at water surface.. . . .	120 "

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

EARLIER CANALS.

A system of three canals preceded the Bearharnois. These were:—

COTEAU DU LAC CANAL.

Construction commenced.. . . .	1779
" completed.. . . .	1780

SPLIT ROCK CANAL.

Construction commenced.. . . .	1779
" completed.. . . .	1780

CASCADE POINT CANAL.

Construction commenced.. . . .	1782
" completed.. . . .	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

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Two canals were also constructed off Burlington Bay, Ontario. They were:—

BURLINGTON BAY CANAL.

Construction commenced..	1825
“ completed..	1832

DESJARDINS CANAL.

Construction commenced..	1826
“ completed..	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was $7\frac{1}{2}$ feet.